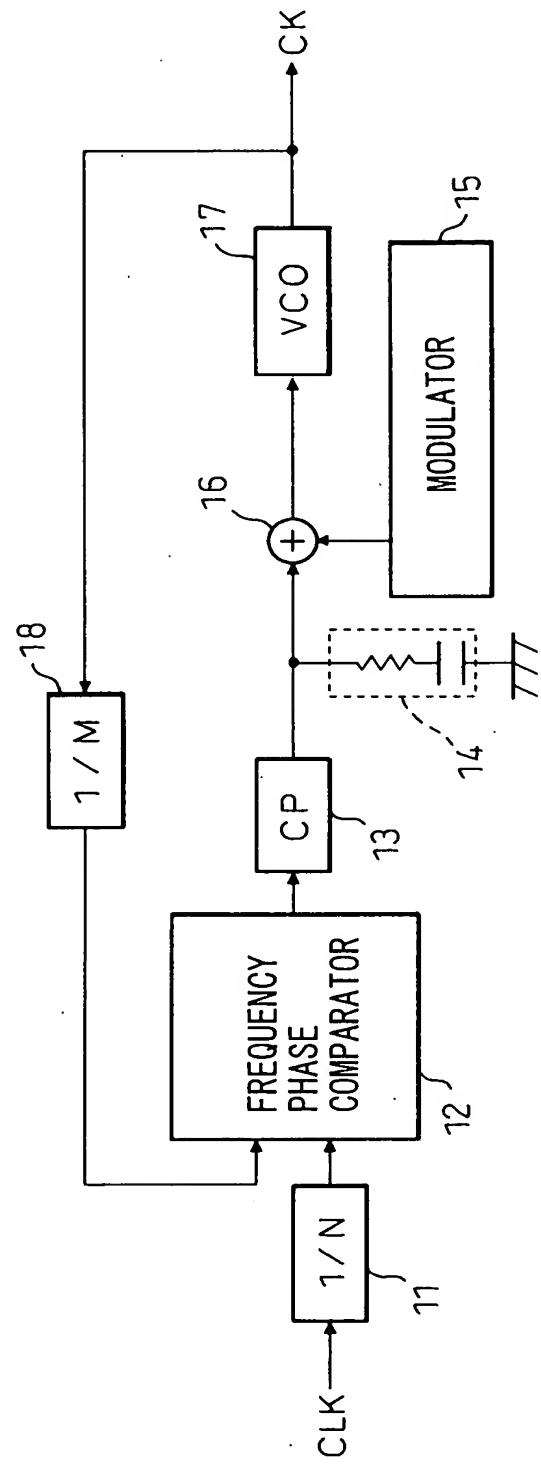


U2
Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 1



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
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FIG.2

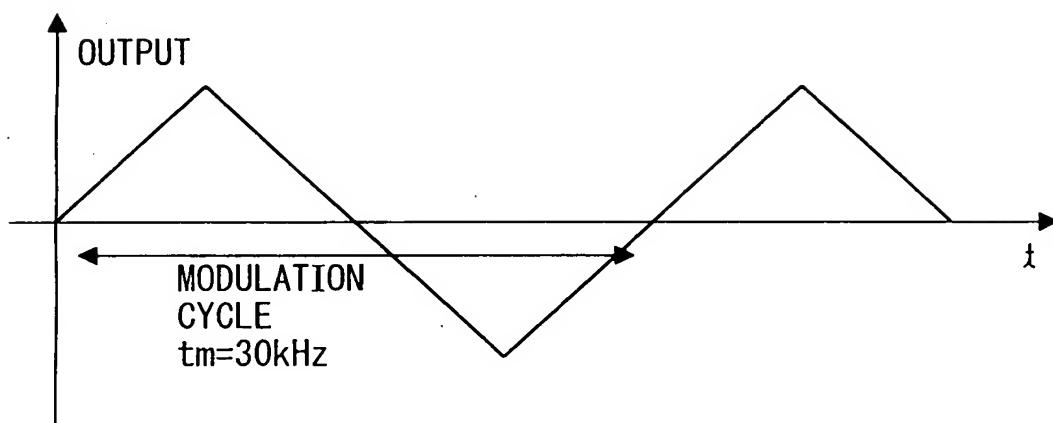
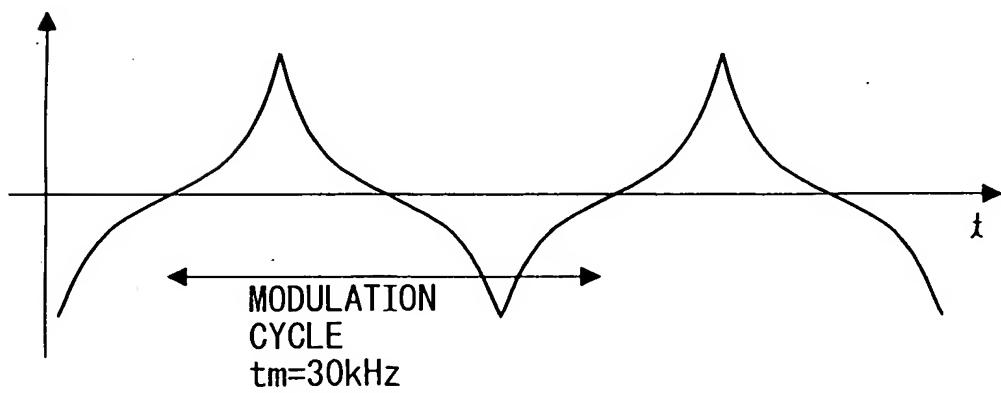


FIG.3



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
Docket No.: 100021-00138

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FIG. 4

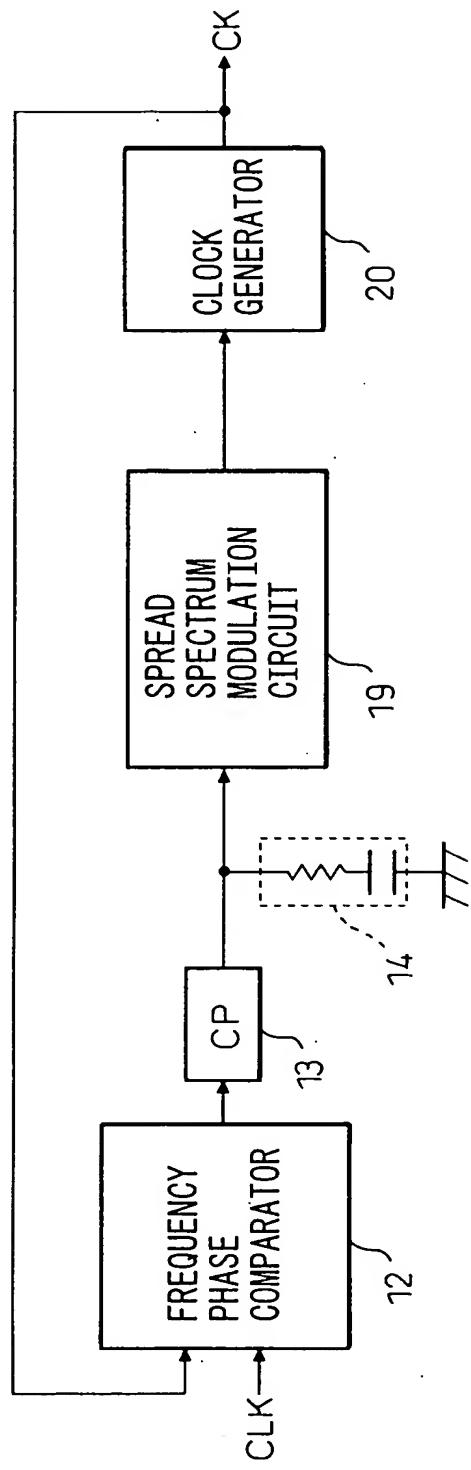


FIG.5A

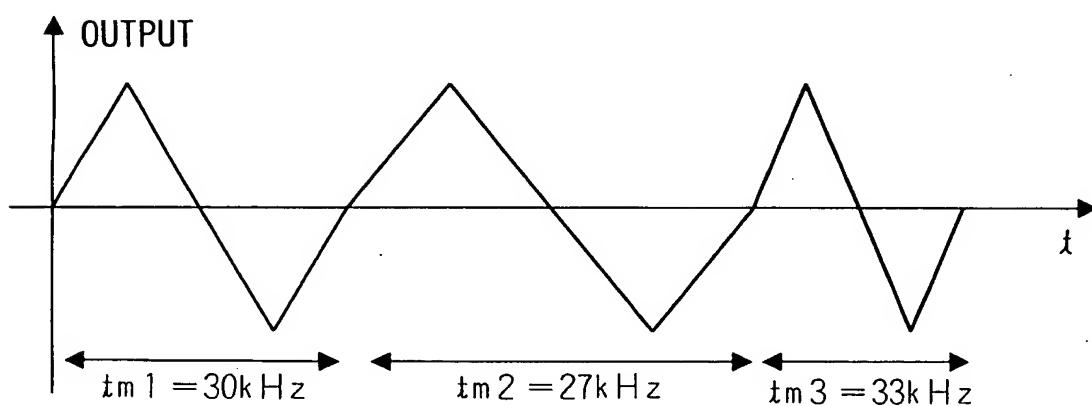
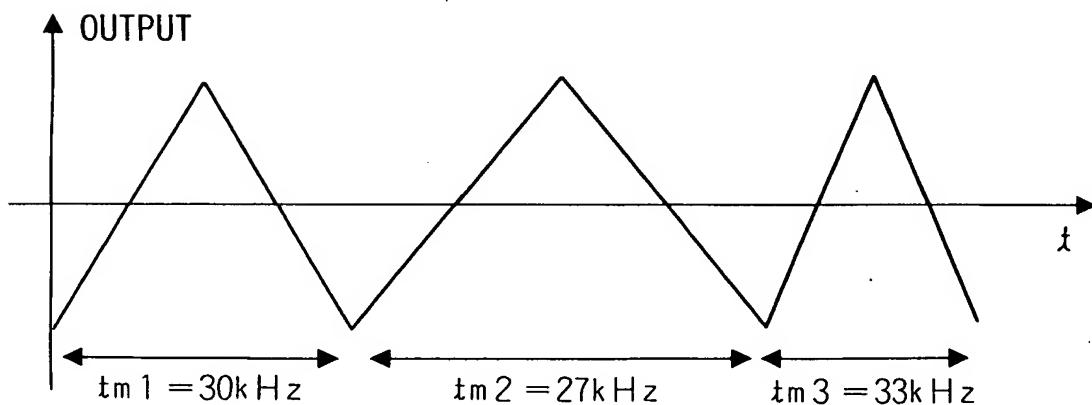


FIG.5B



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER
GENERATION CIRCUIT AND
SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 6A FIG. 6B

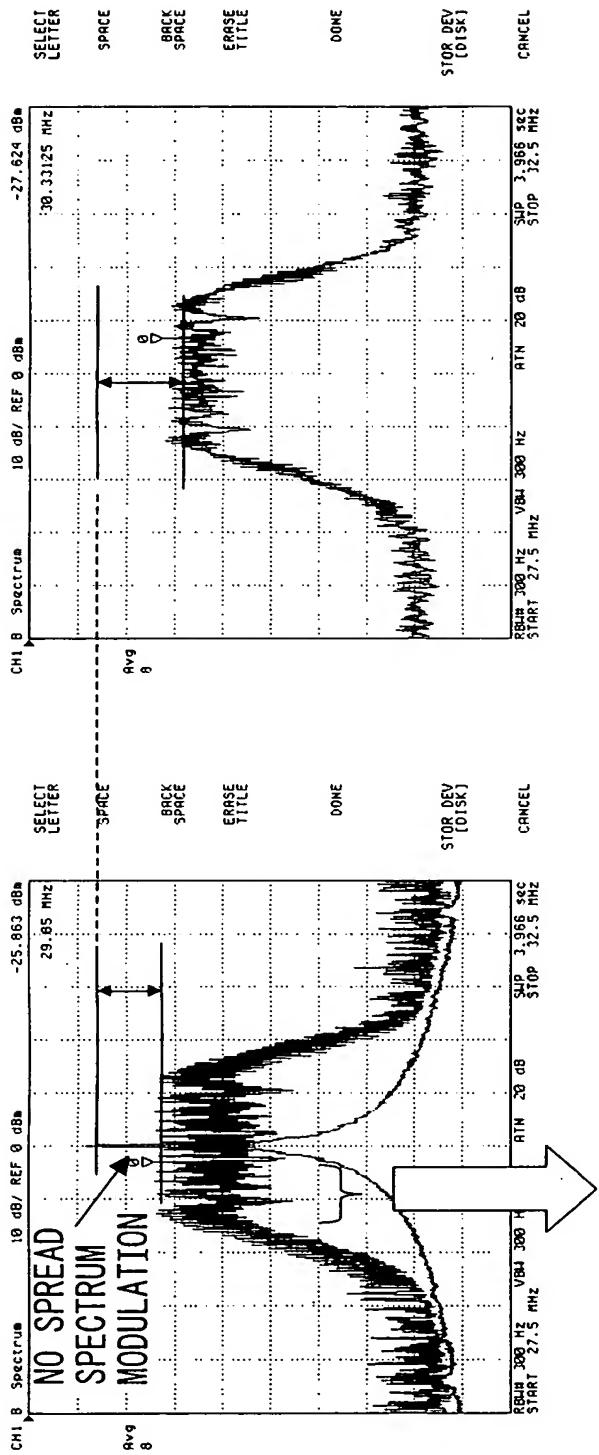


FIG.7A

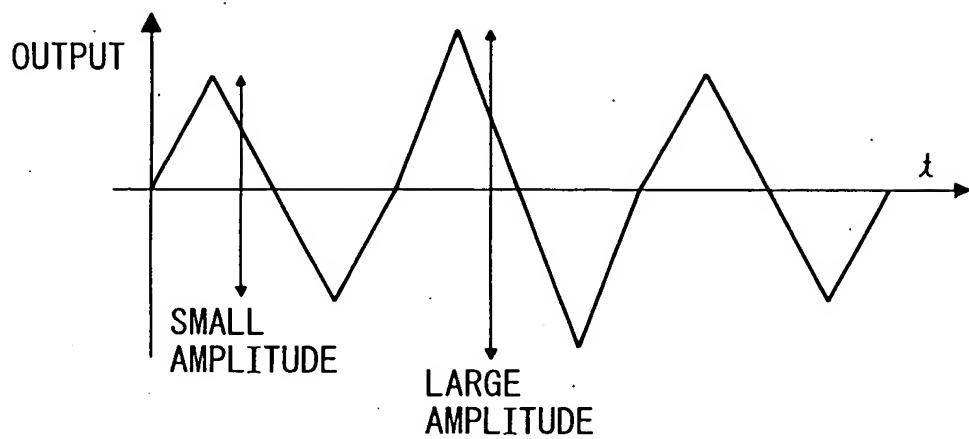
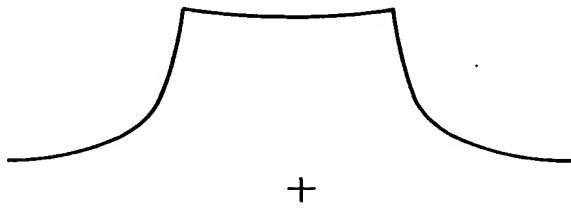


FIG.7B

SPECTRUM WHEN A
SMALL AMPLITUDE
IS APPLIED



+

FIG.7C

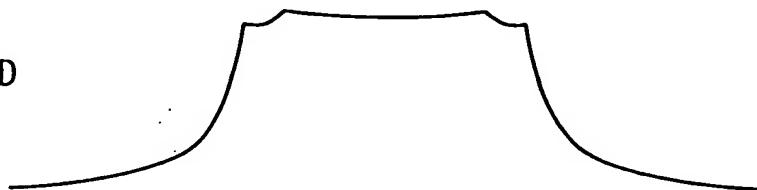
SPECTRUM WHEN A
LARGE AMPLITUDE
IS APPLIED



||

FIG.7D

SYNTHESIZED
SPECTRUM



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER
GENERATION CIRCUIT AND
SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
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FIG. 8

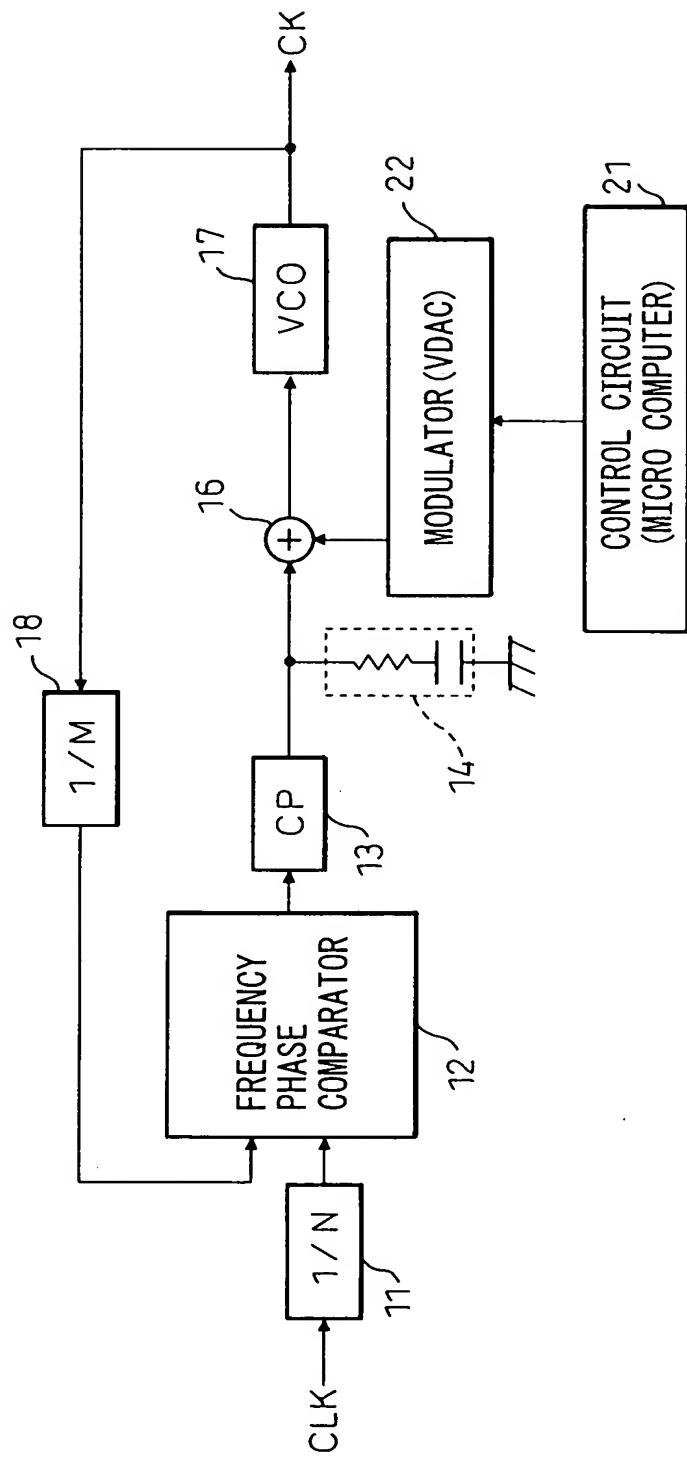
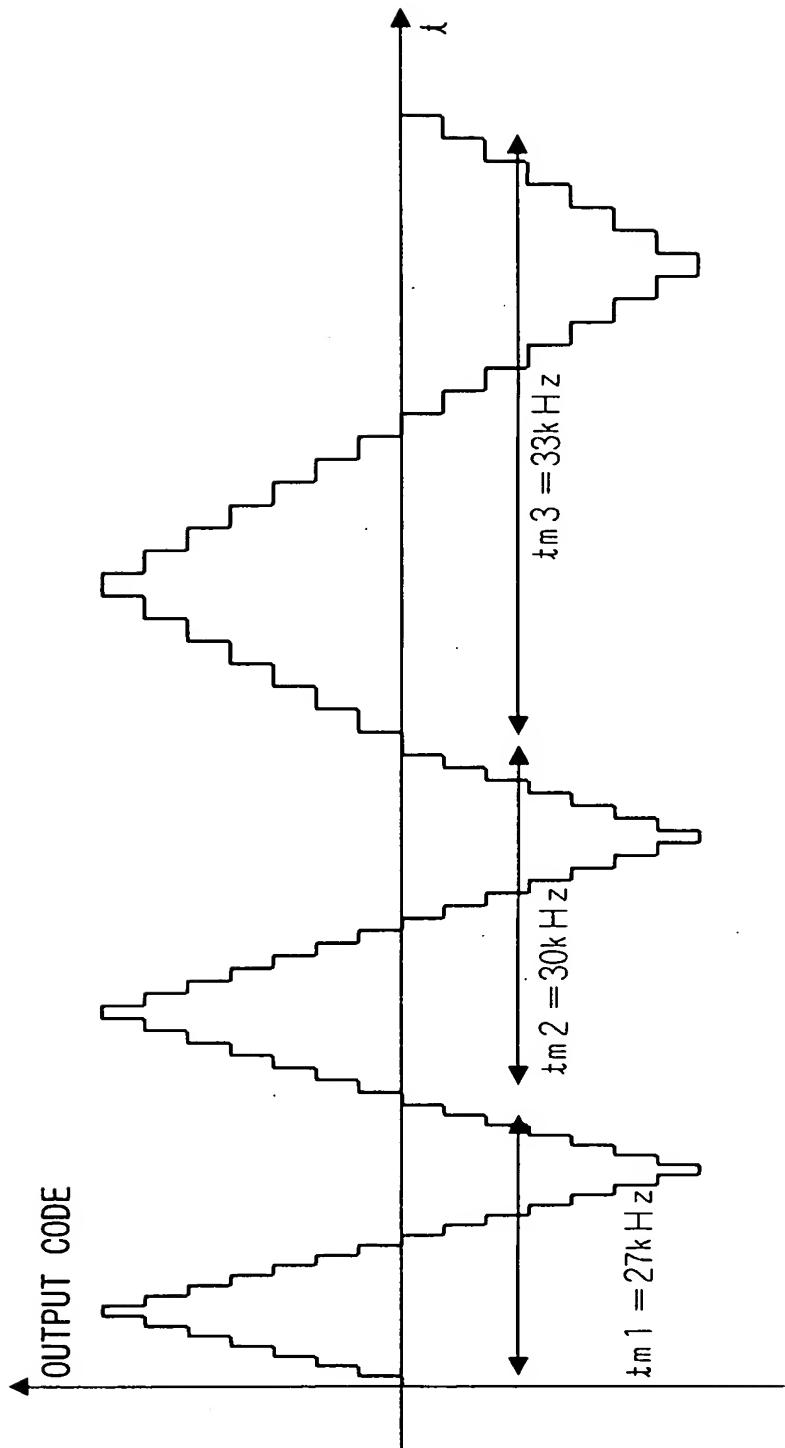


FIG. 9



**Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER
GENERATION CIRCUIT AND
SEMICONDUCTOR DEVICE**
Inventor: MIYATA, et al.
Appln. No.: Unknown
Docket No.: 100021-00138

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FIG. 10

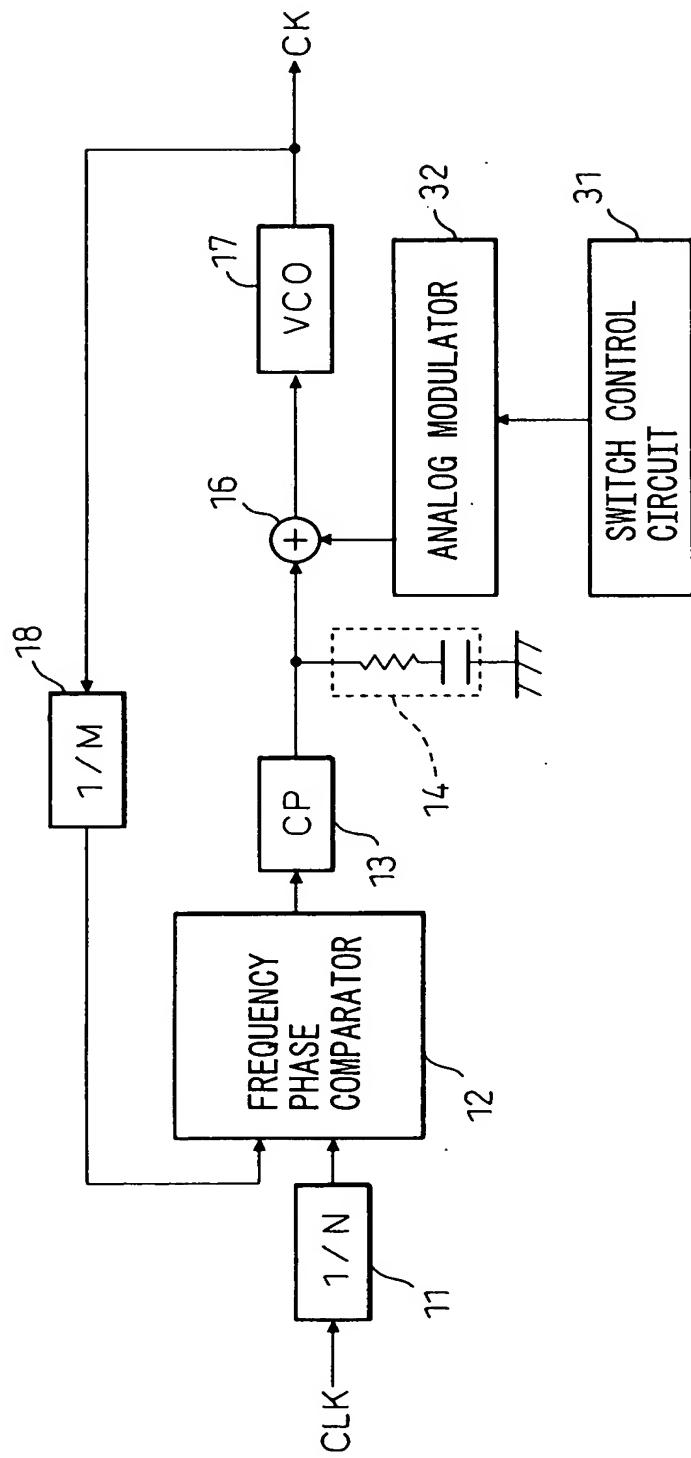
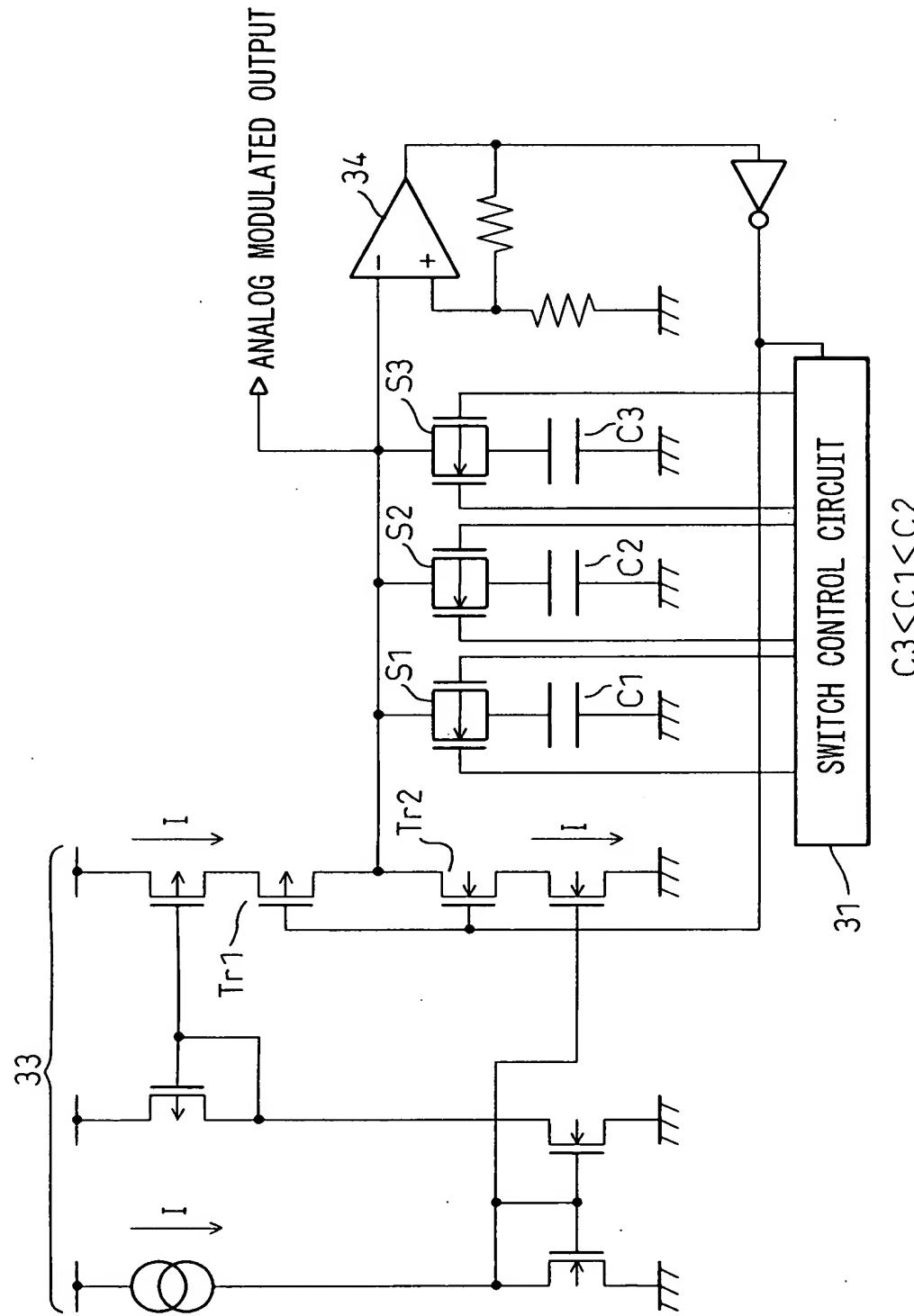


FIG.11



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER
GENERATION CIRCUIT AND
SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG.12

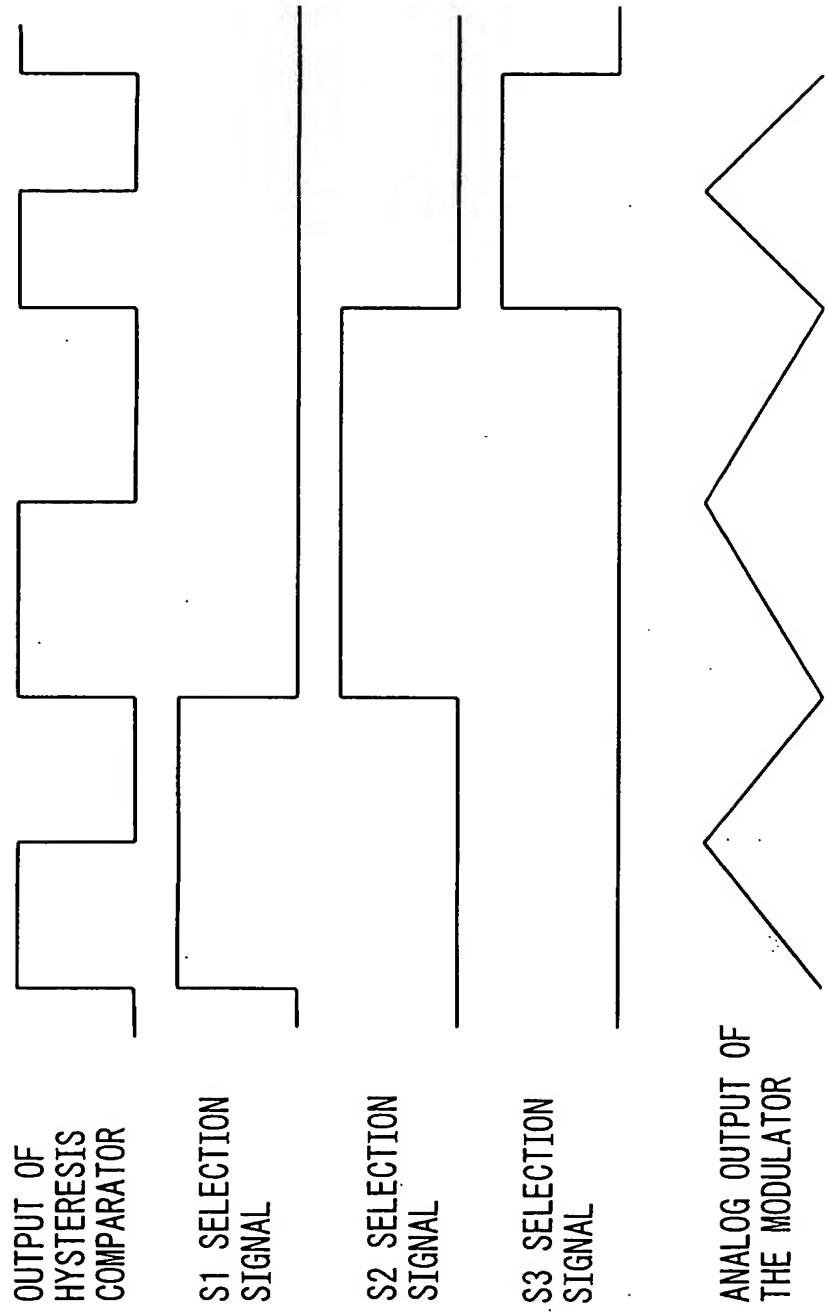
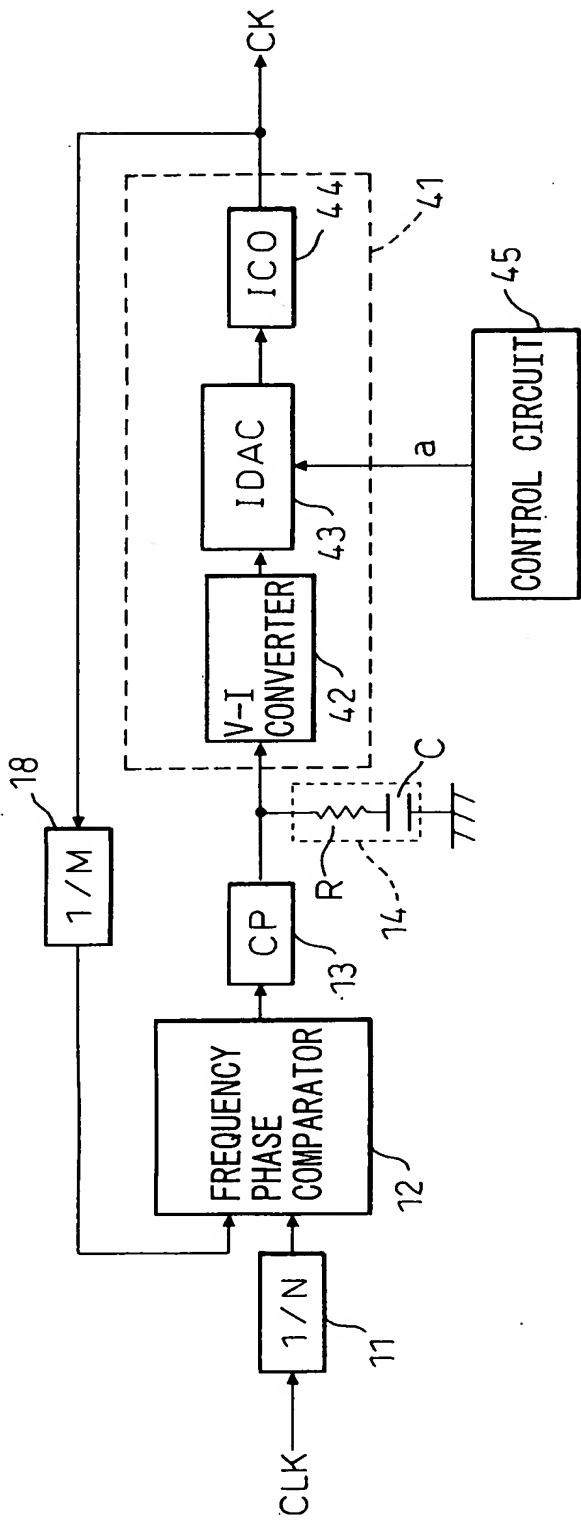


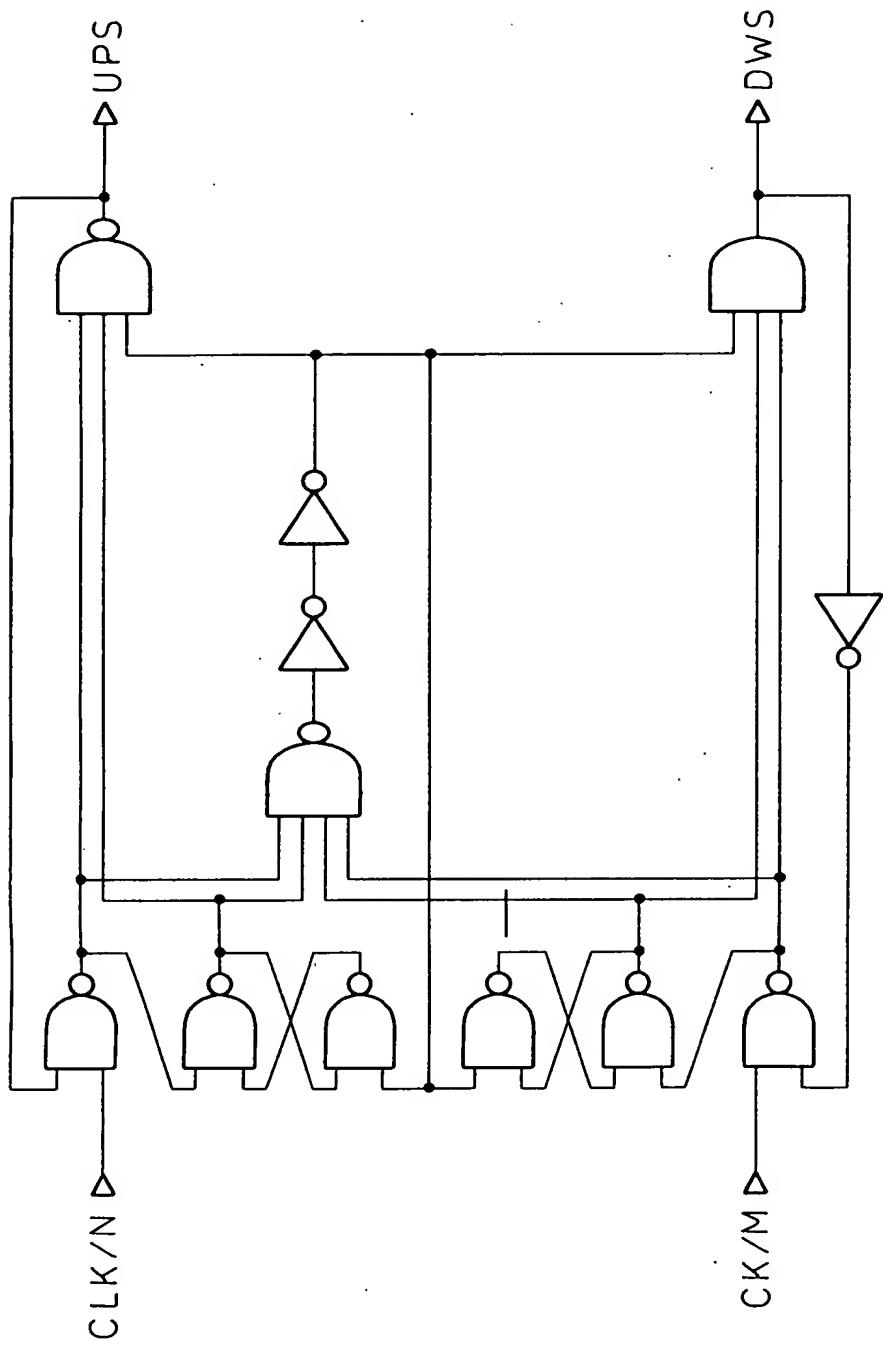
FIG. 13



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 14



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
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FIG.15

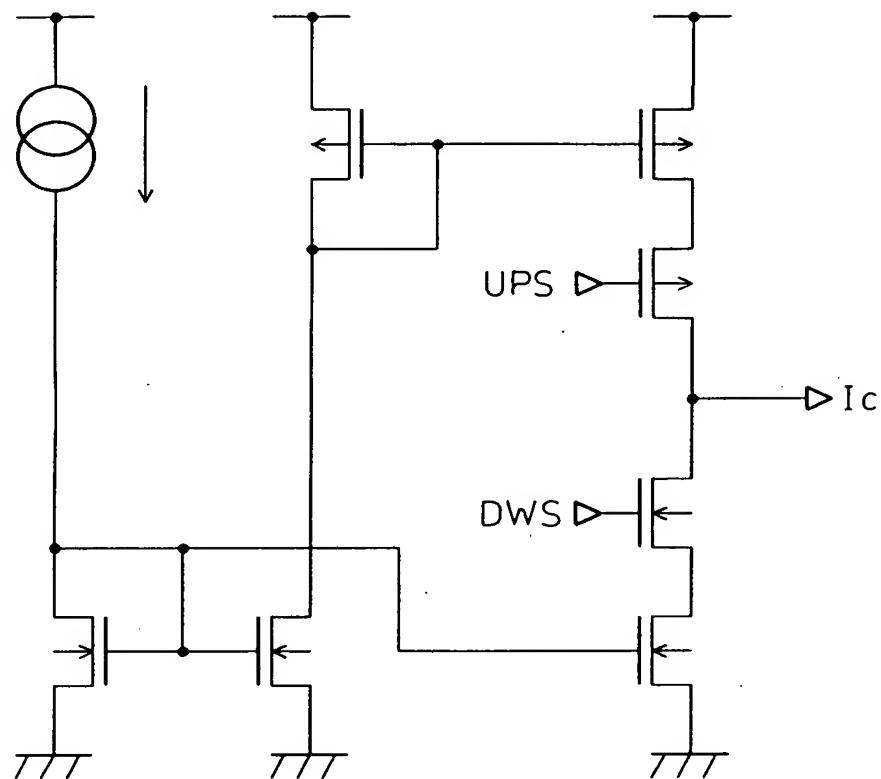
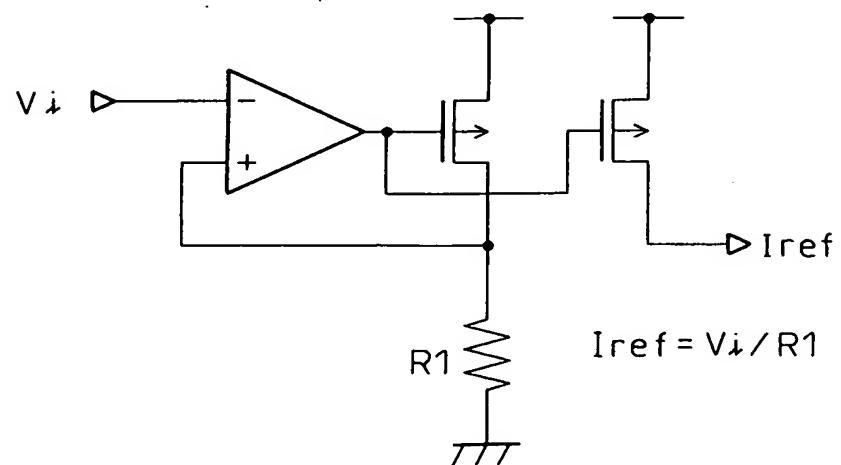


FIG.16



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 17

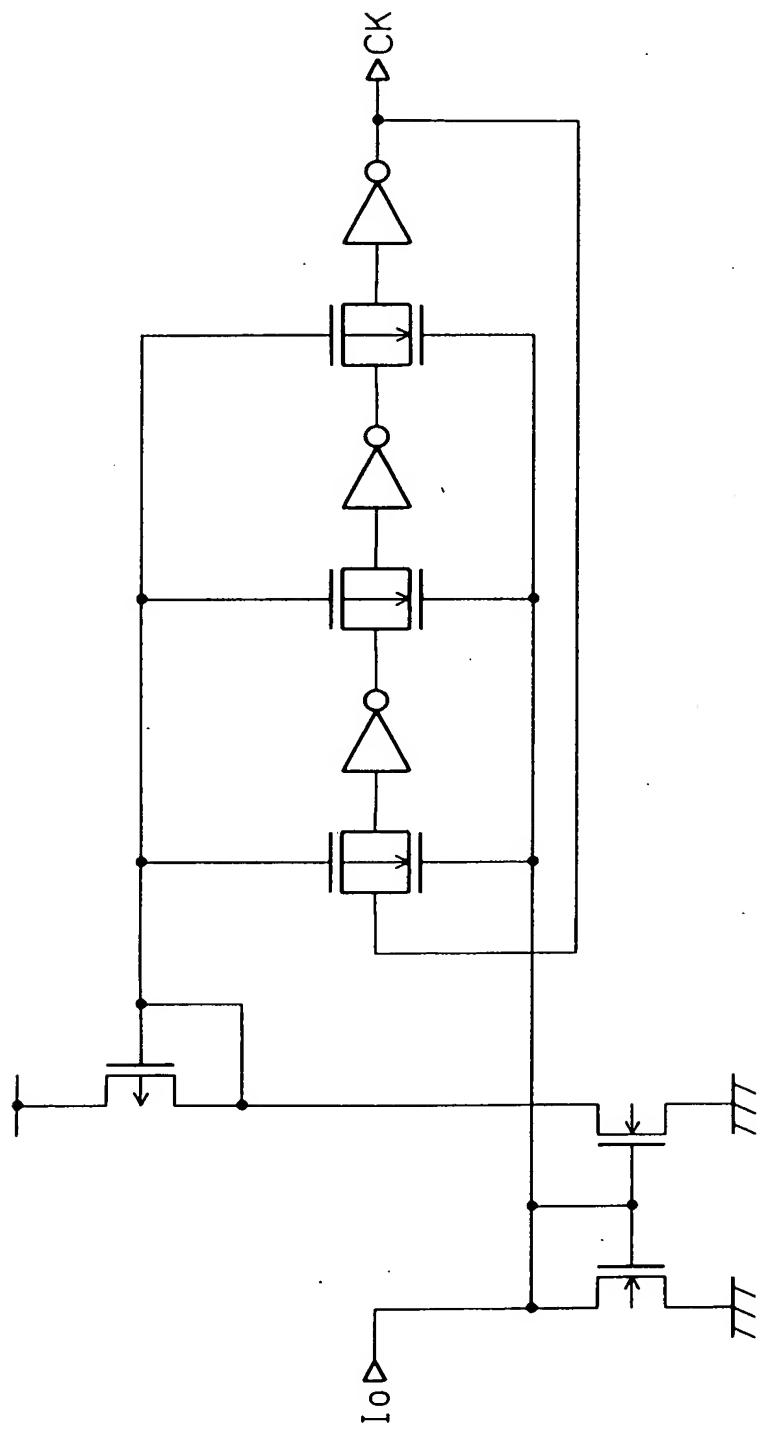
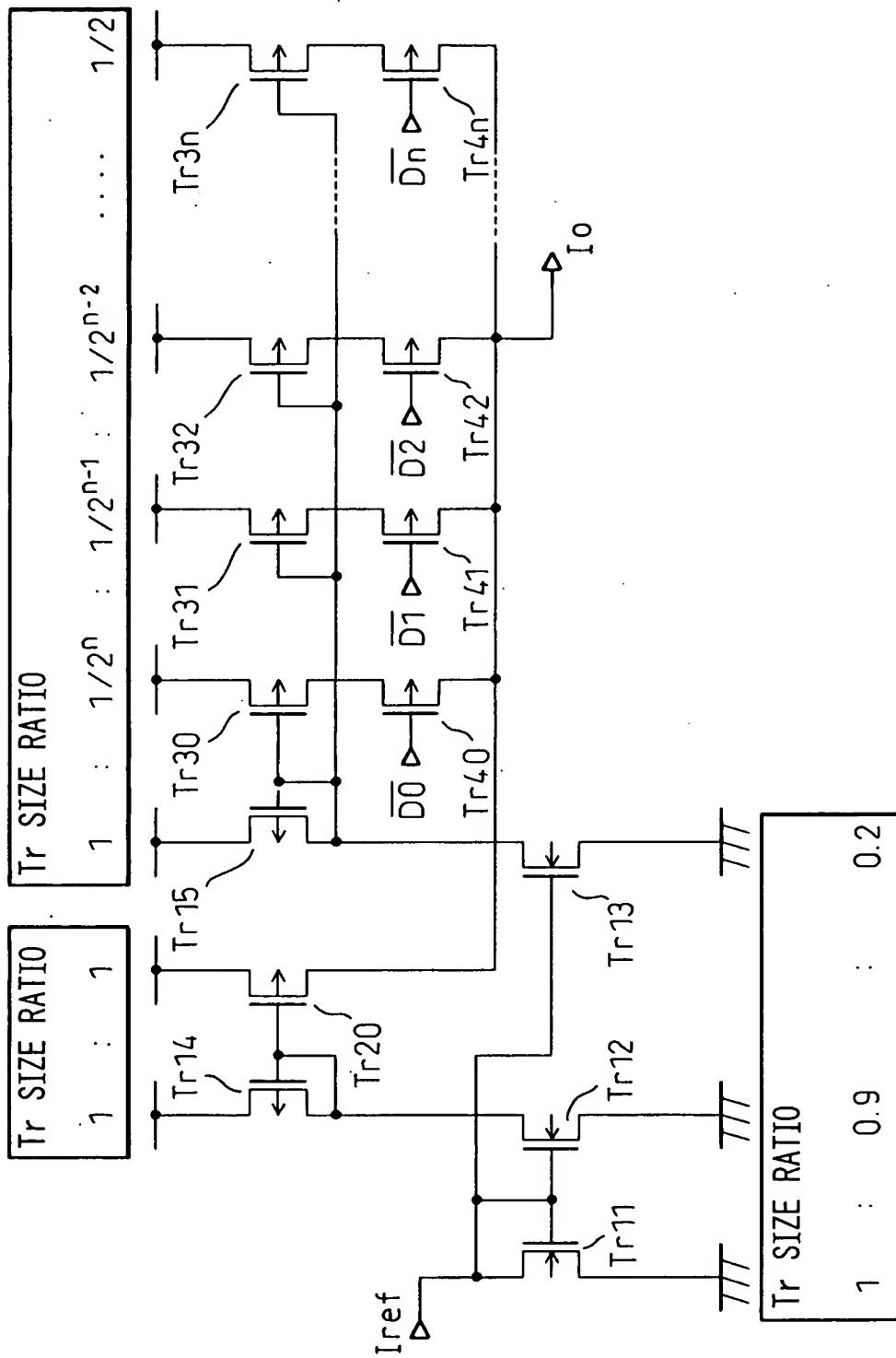


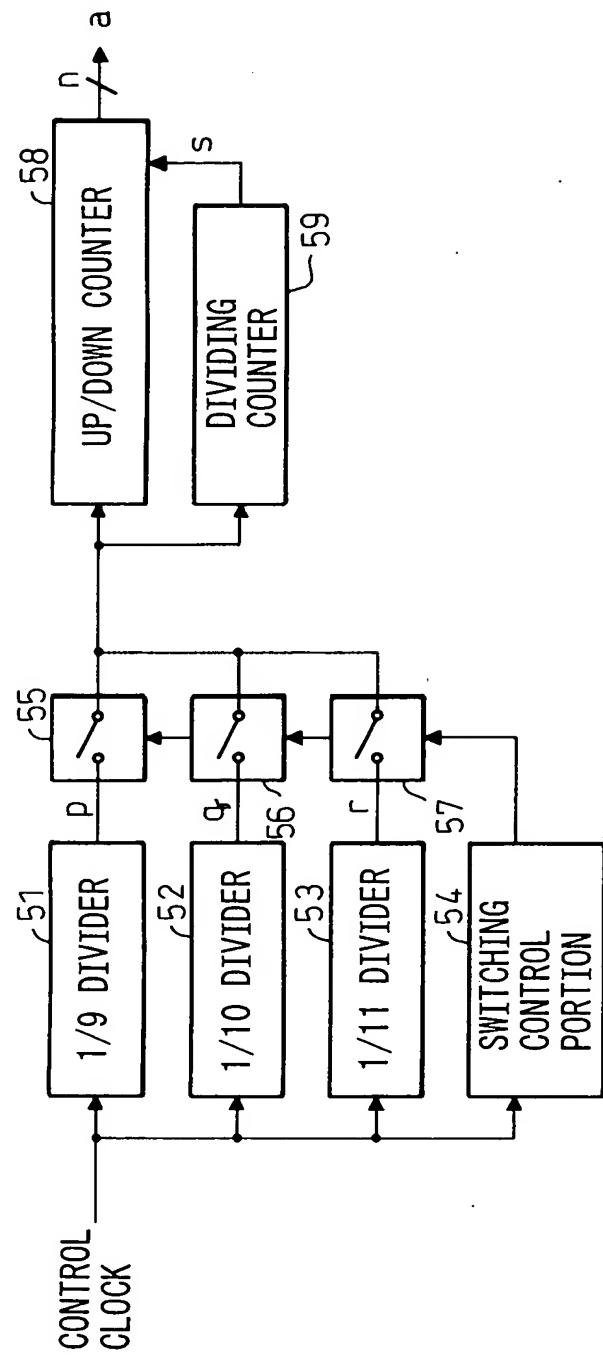
FIG. 18



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
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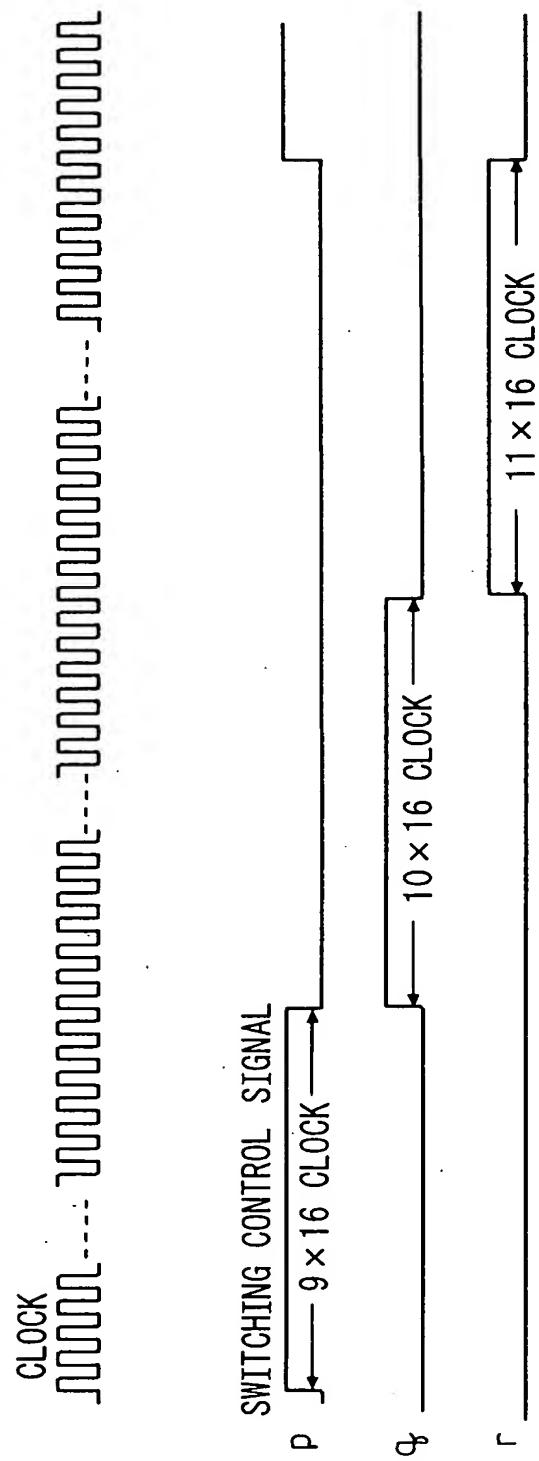
FIG. 19



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
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FIG. 20



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 21

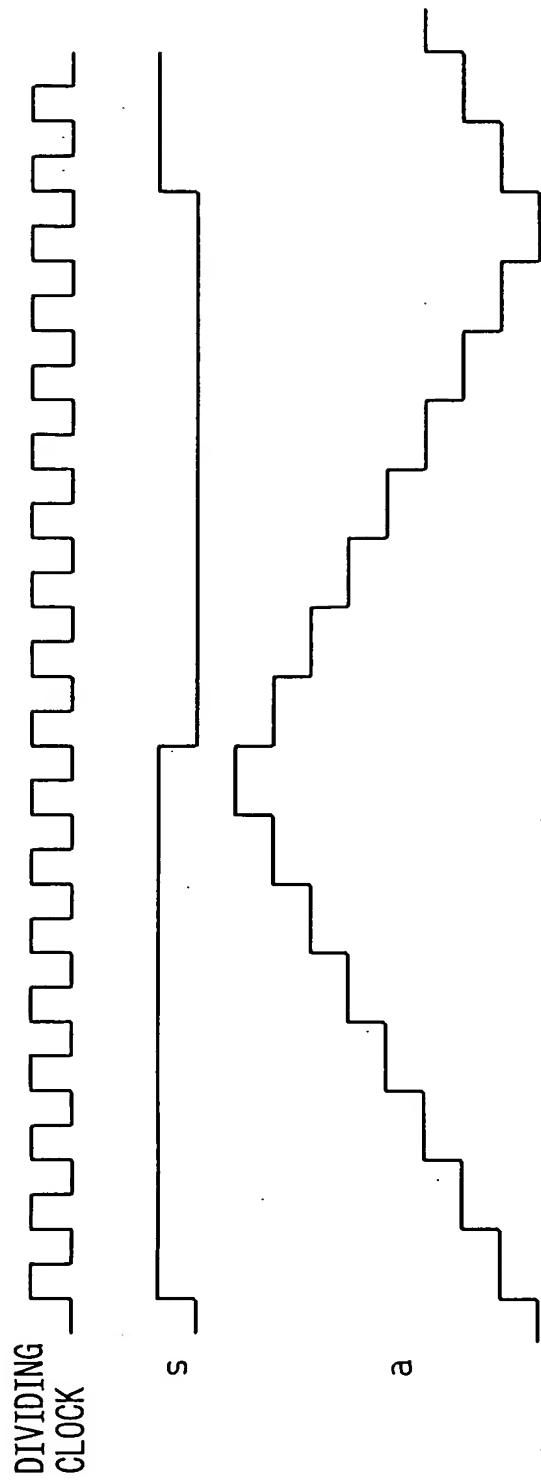


FIG. 22

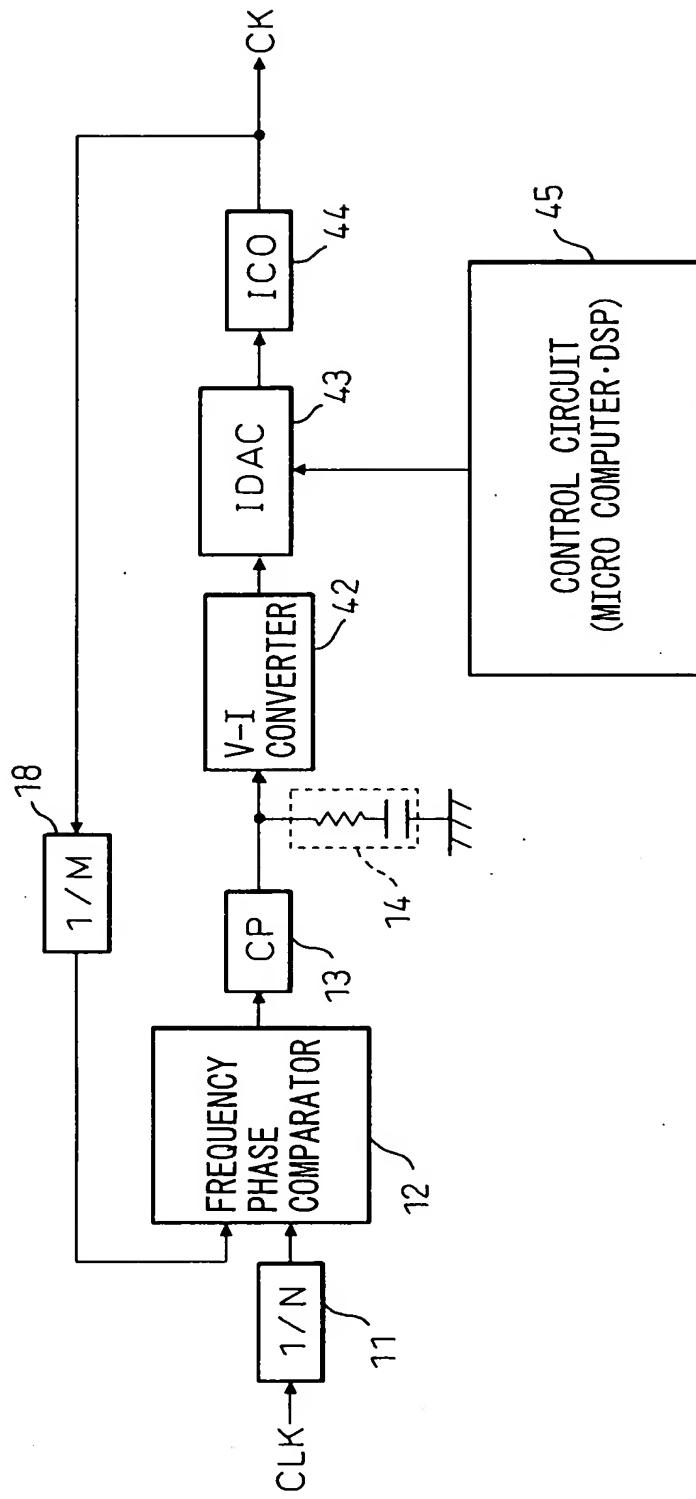
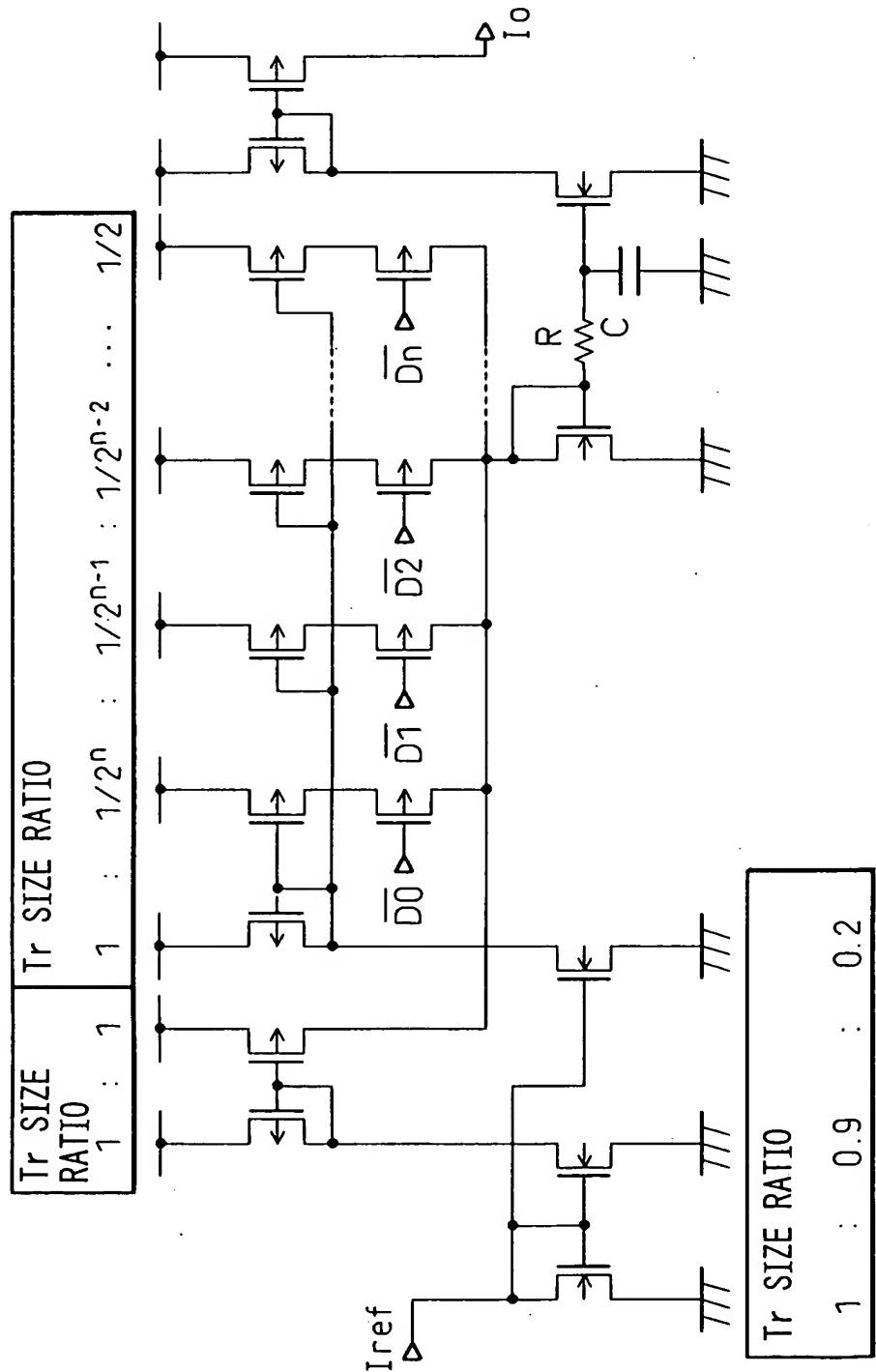


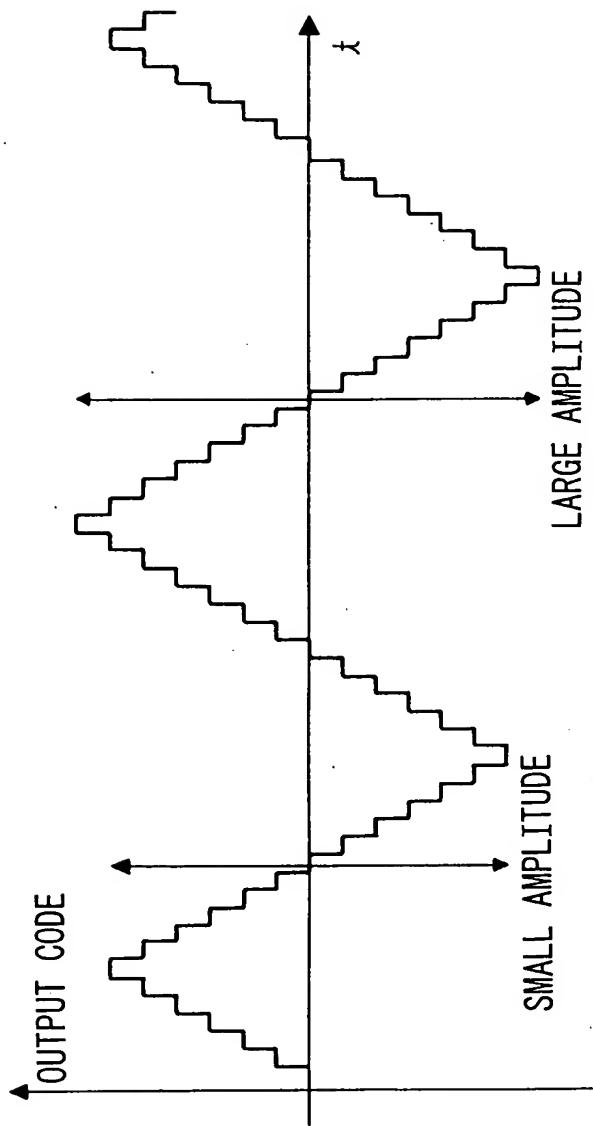
FIG. 23



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 24



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 25A

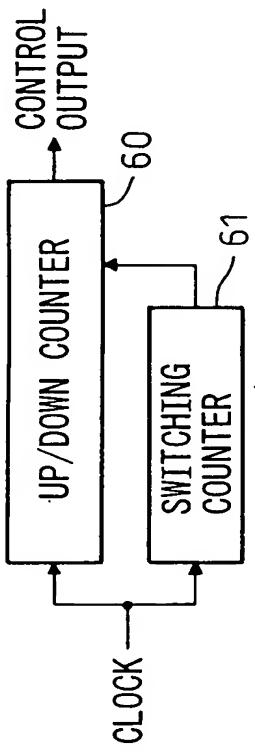
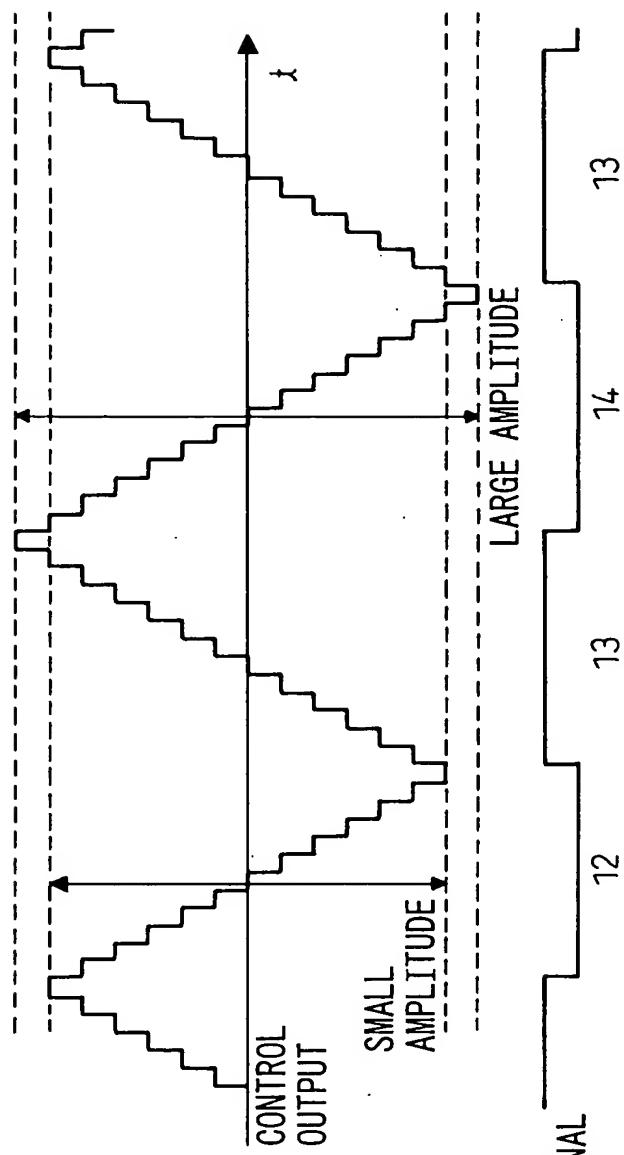


FIG. 25B



COUNTING VALUE OF
THE SWITCHING SIGNAL

Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
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FIG.26A

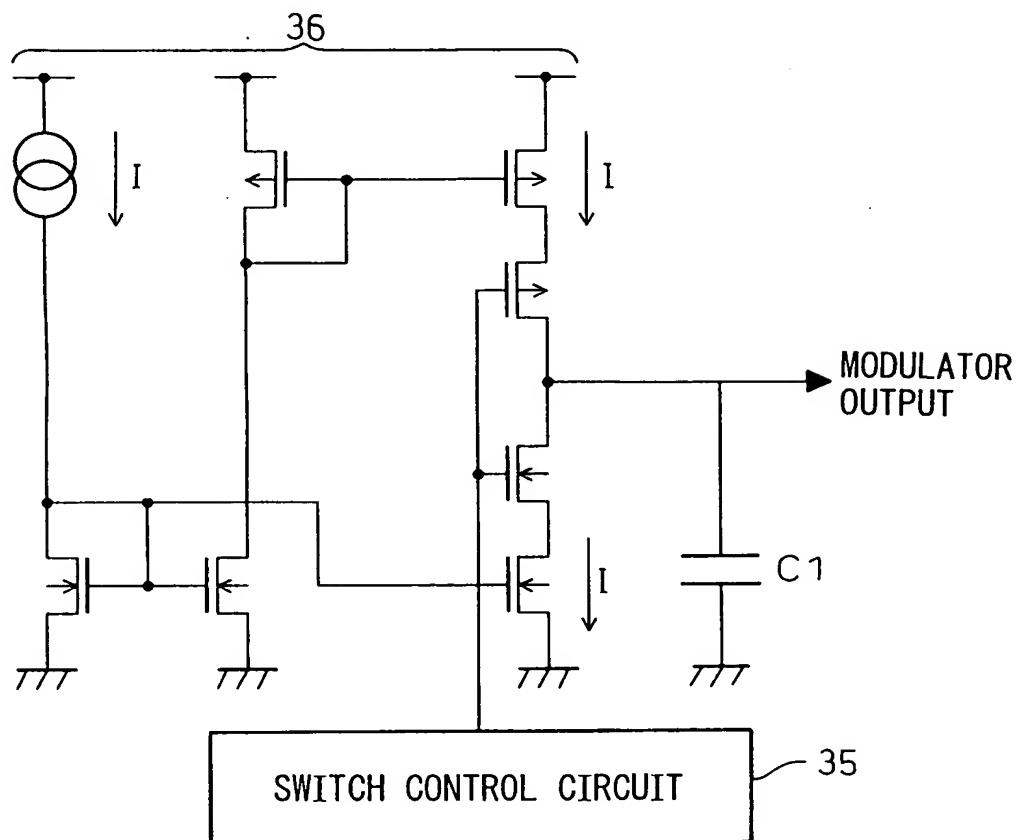


FIG.26B

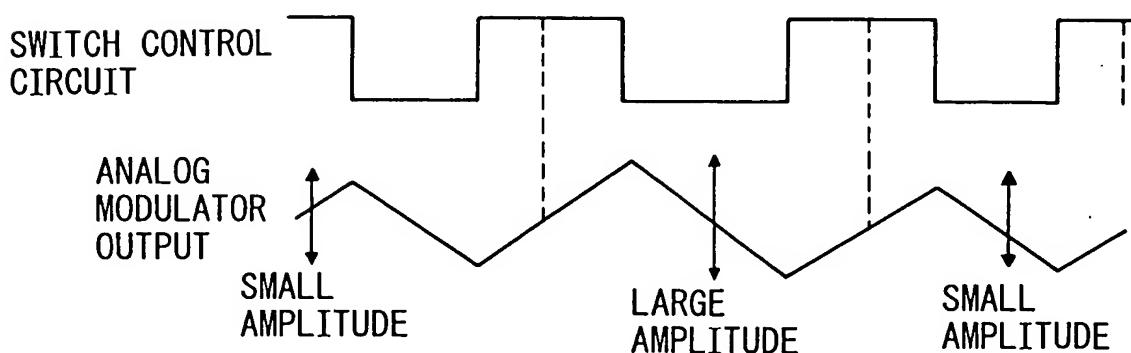
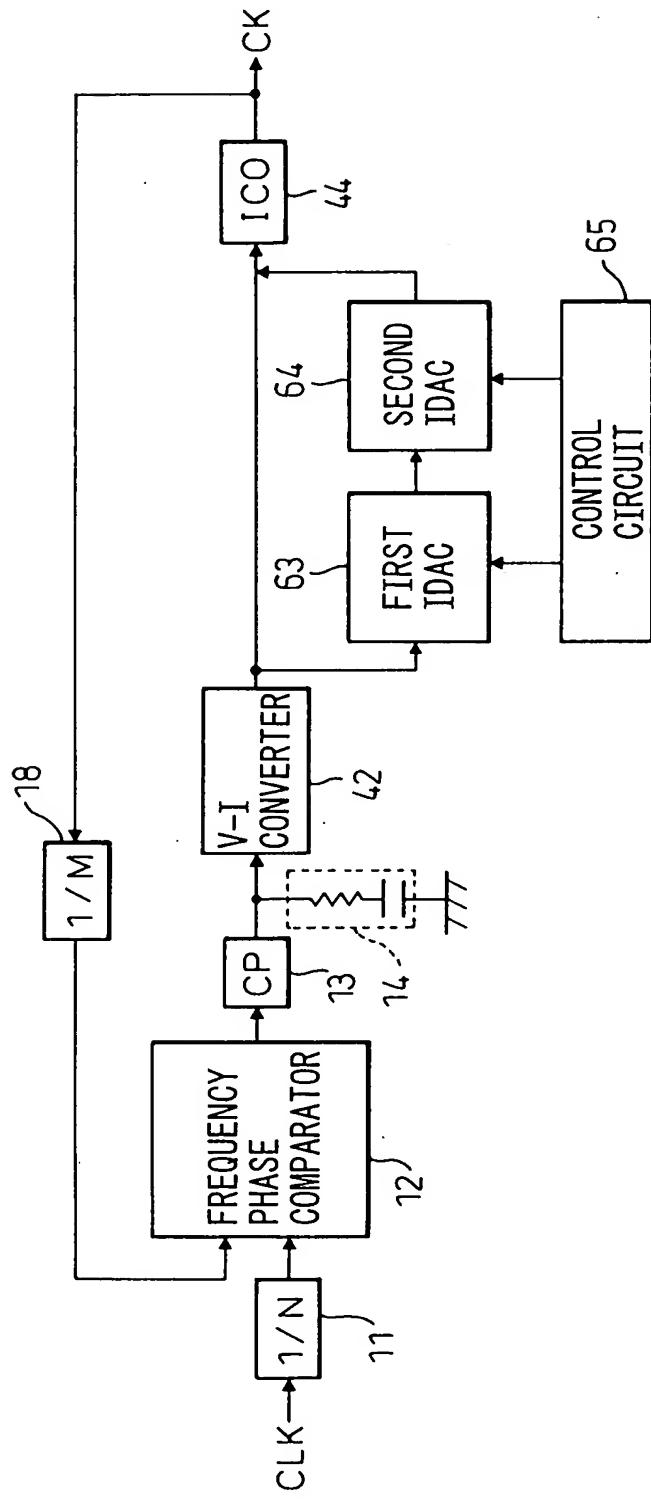


FIG. 27



Title: SPREAD SPECTRUM CLOCK
 GENERATION CIRCUIT, JITTER GENERATION
 CIRCUIT AND SEMICONDUCTOR DEVICE
 Inventor: MIYATA, et al.
 Appln. No.: Unknown
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FIG. 28

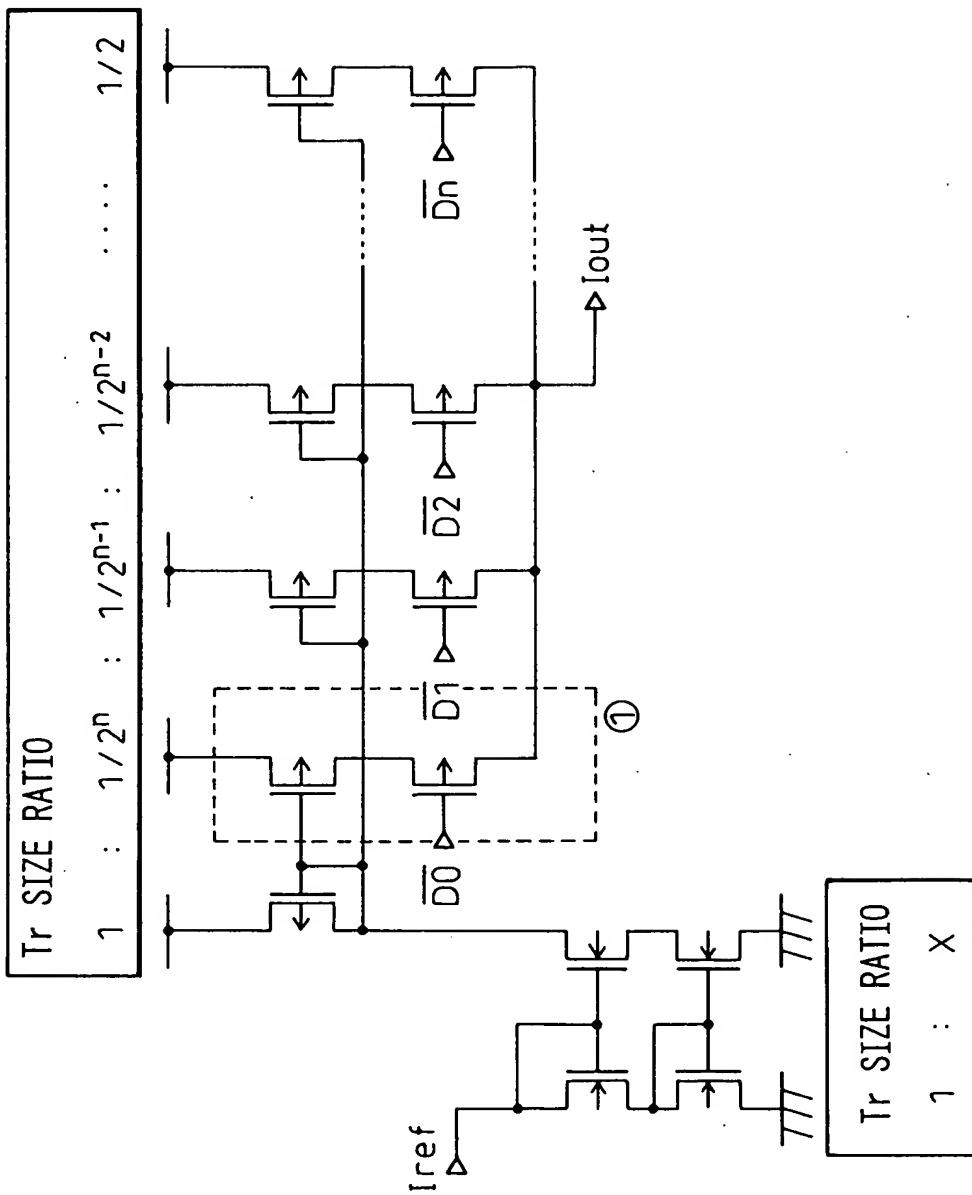


FIG. 29

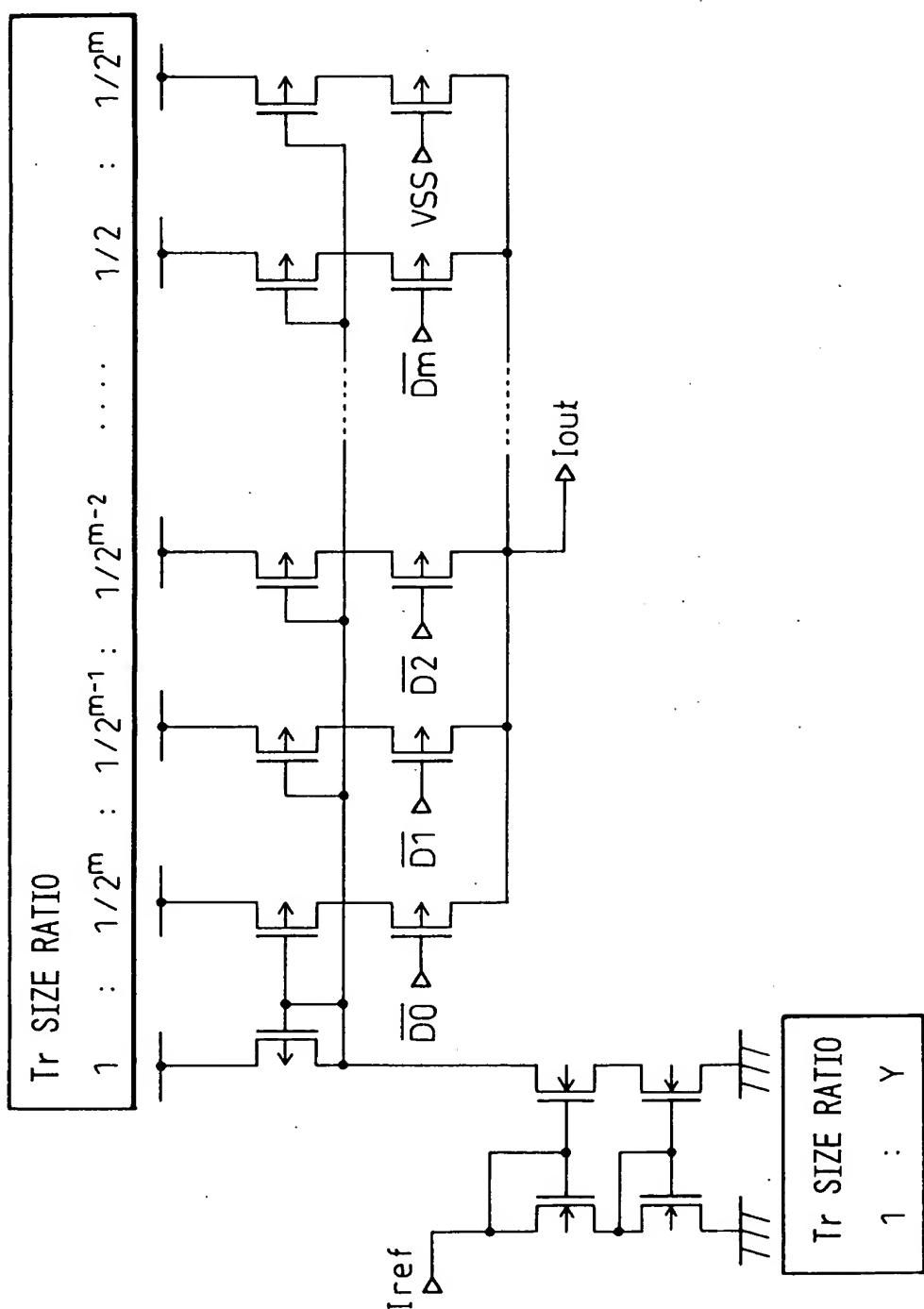


FIG.30A

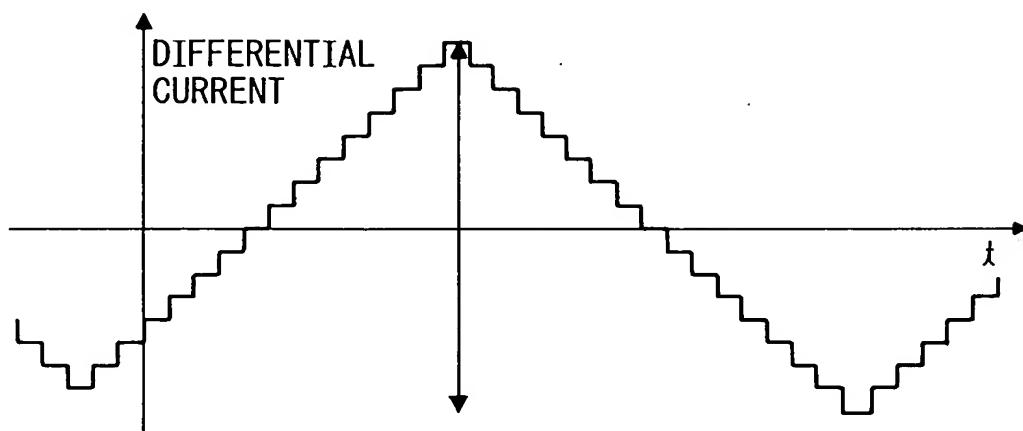


FIG.30B

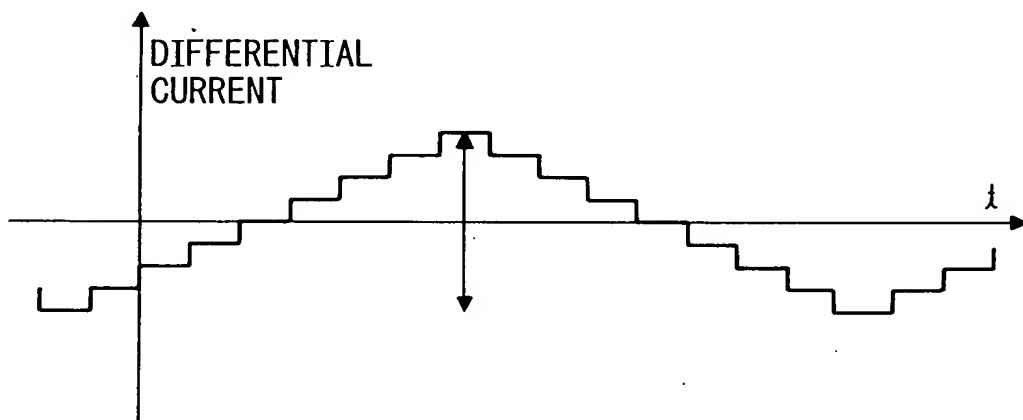


FIG.30C

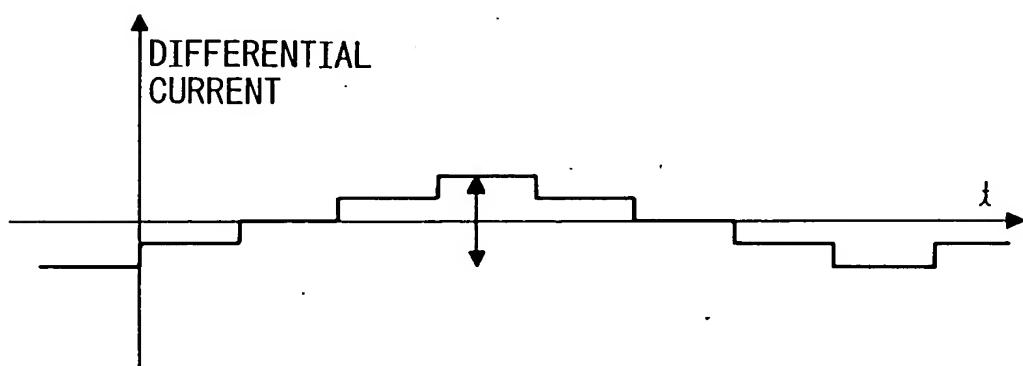


FIG. 31A

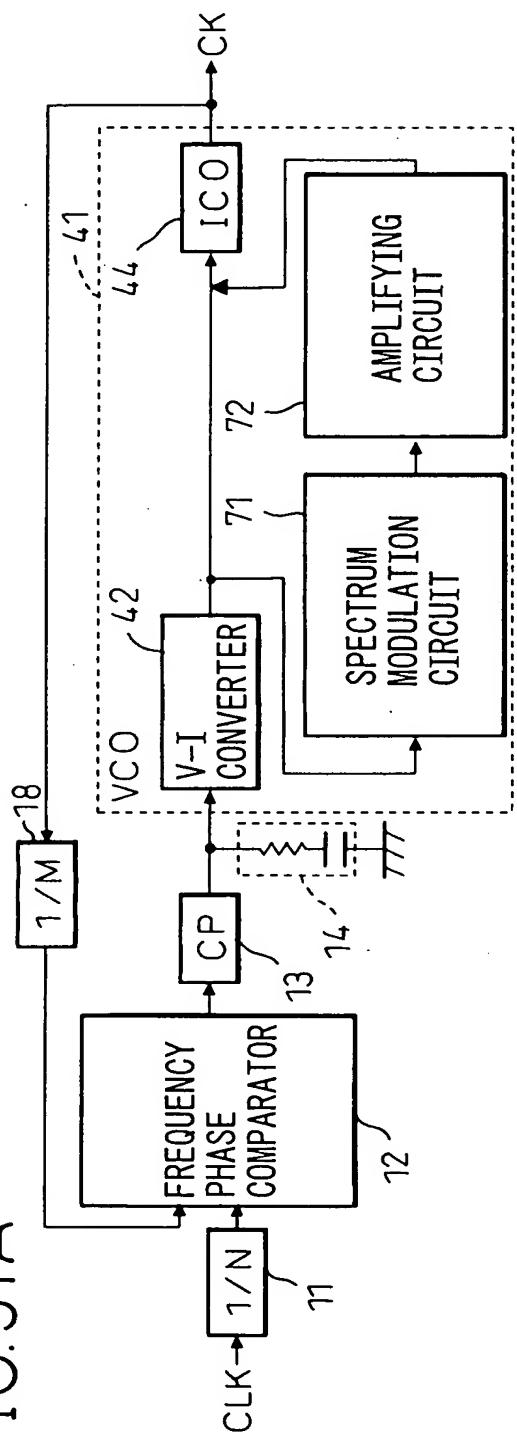
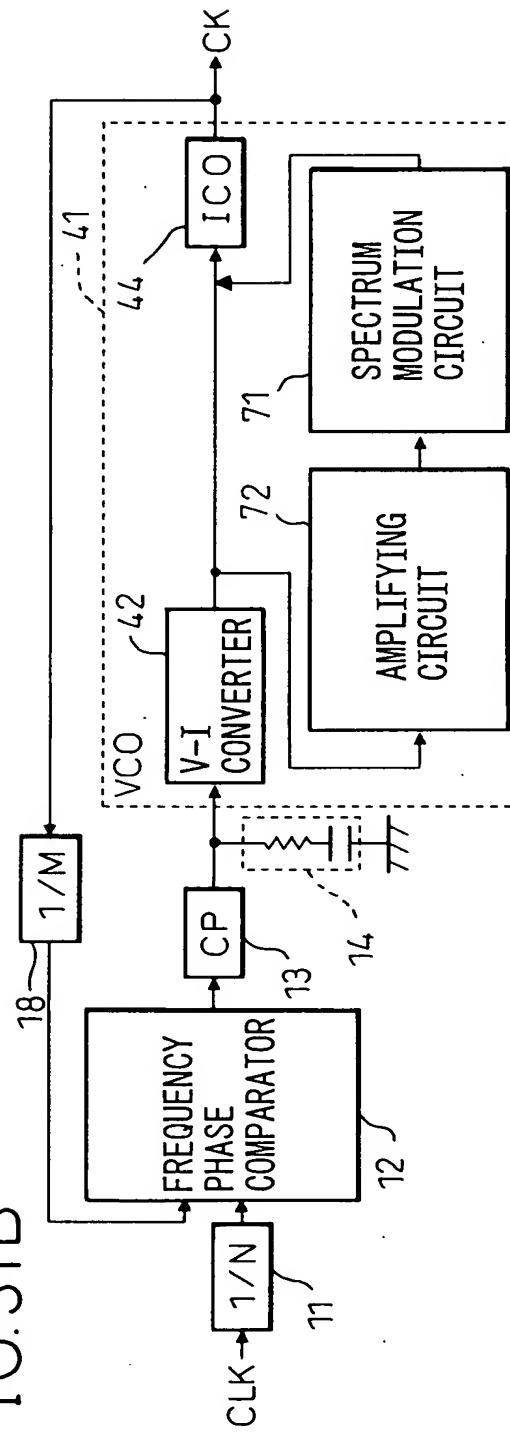


FIG. 31B



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG.32A

AMPLITUDE A

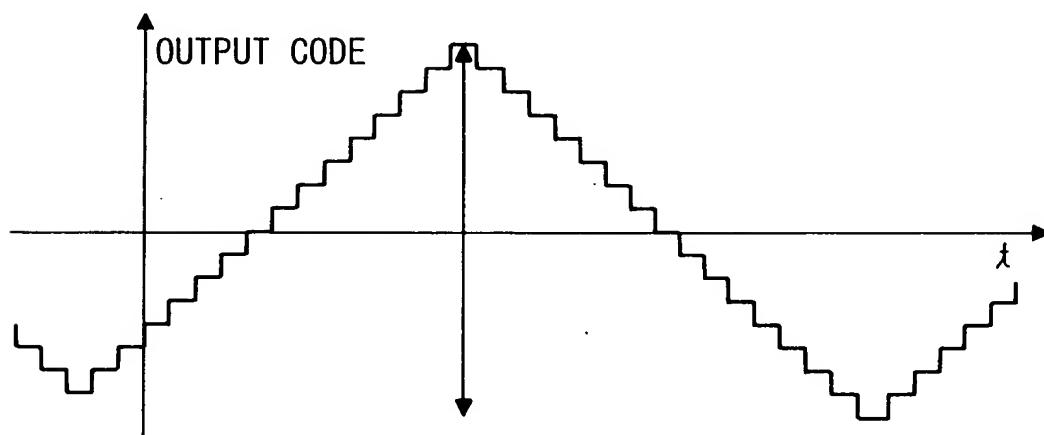
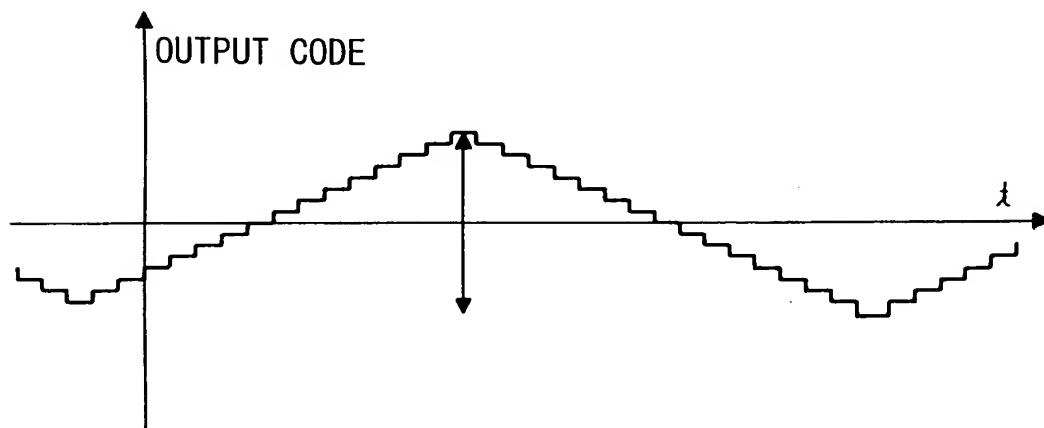


FIG.32B

AMPLITUDE A k/m



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
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FIG. 33

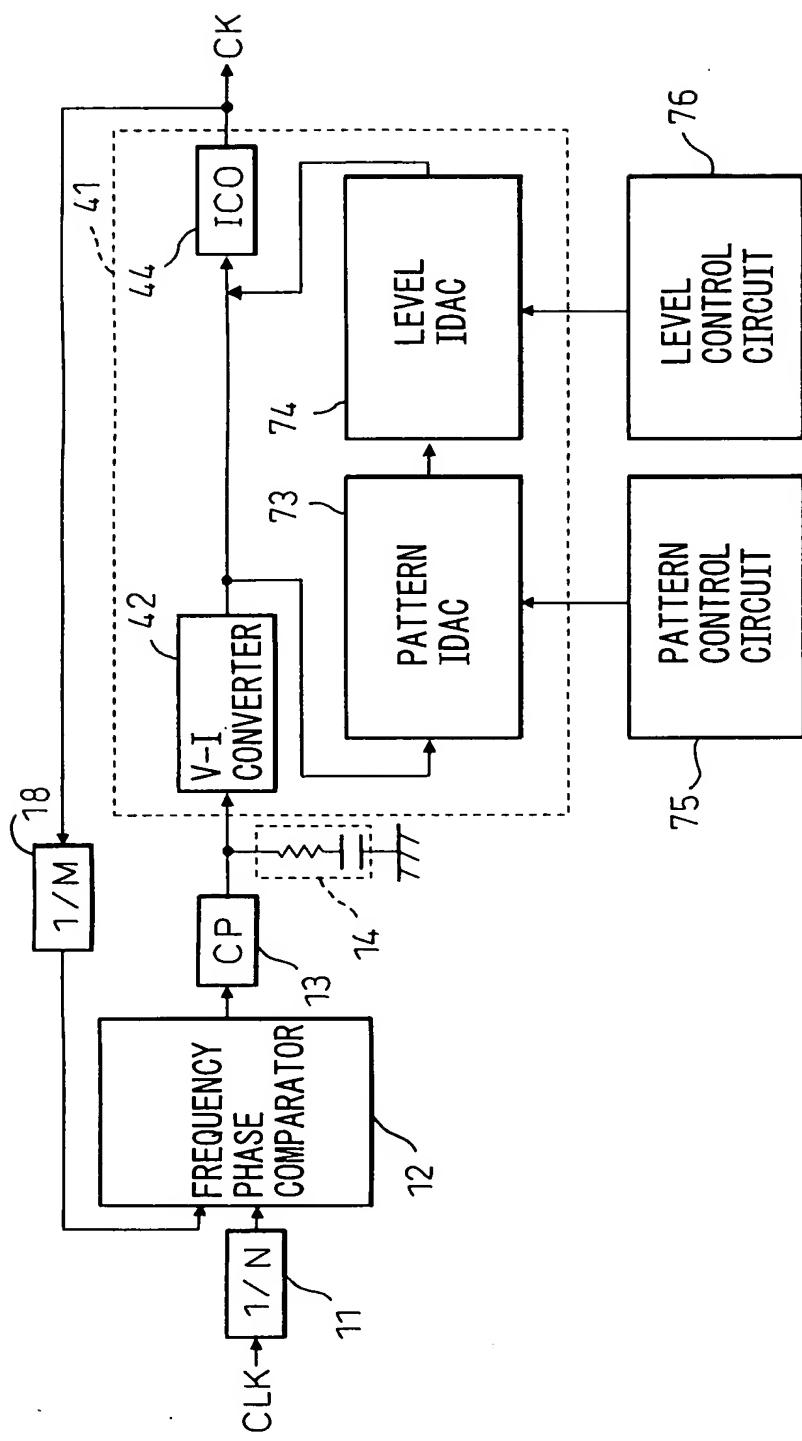


FIG. 34 A

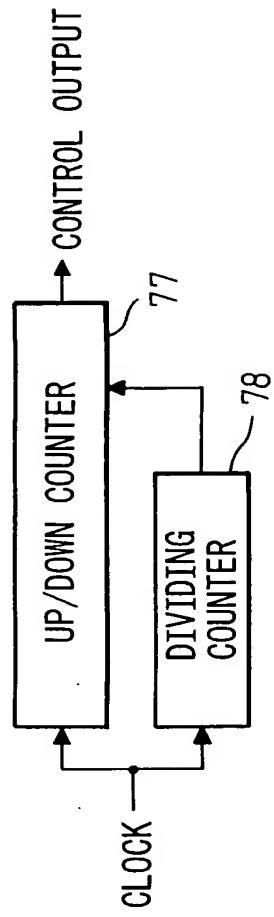


FIG. 34 B

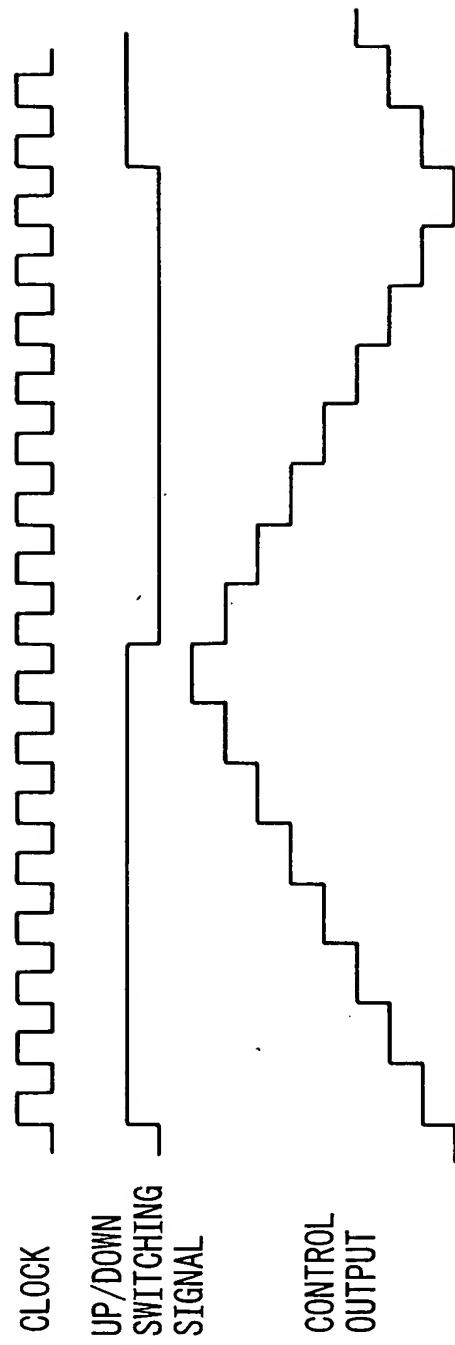
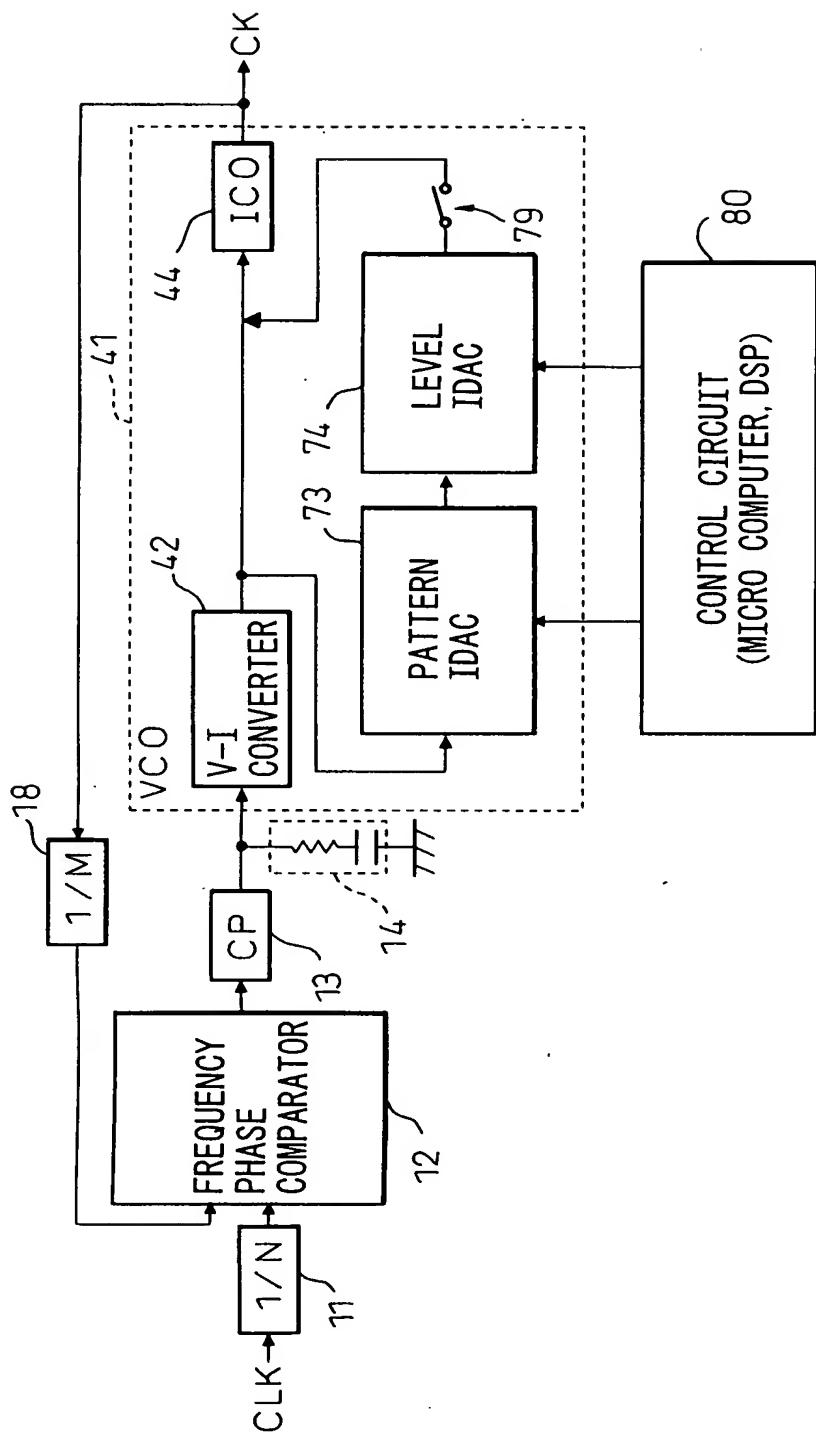


FIG. 35



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
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FIG. 36A

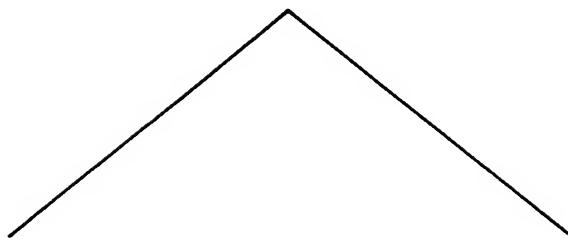


FIG. 36B

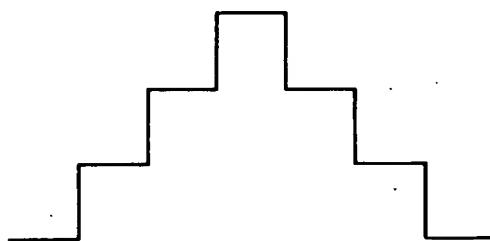
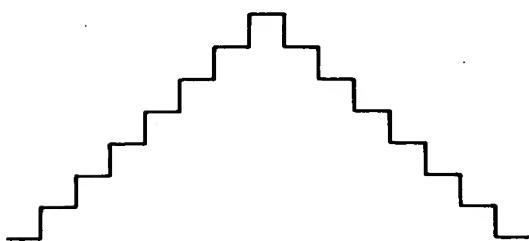


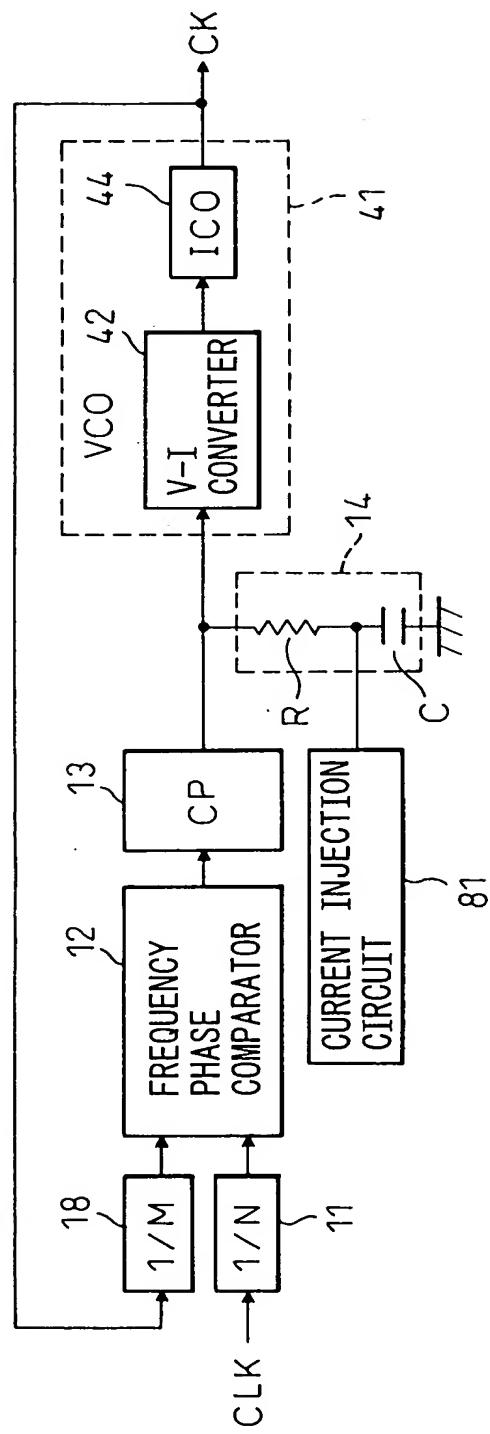
FIG. 36C



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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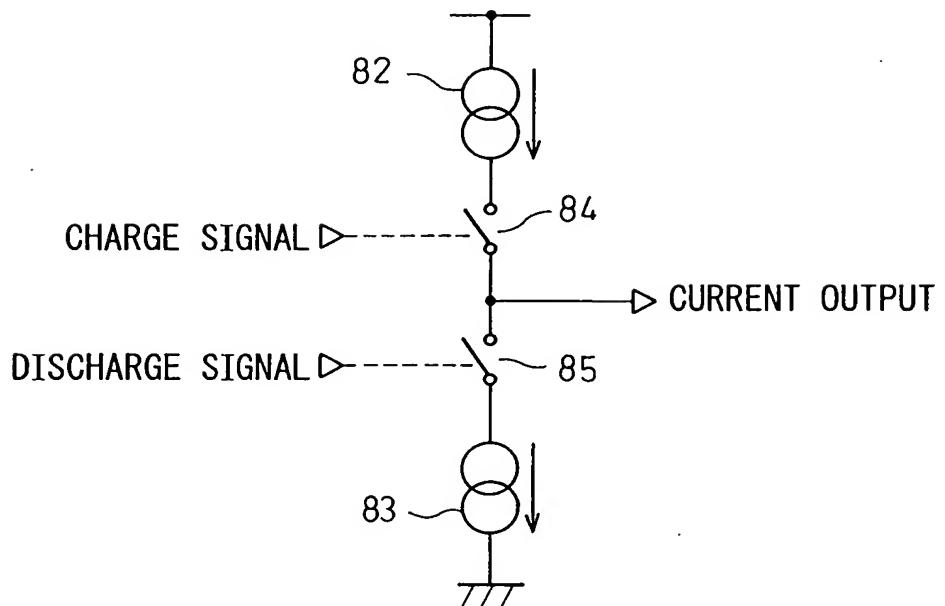
FIG. 37



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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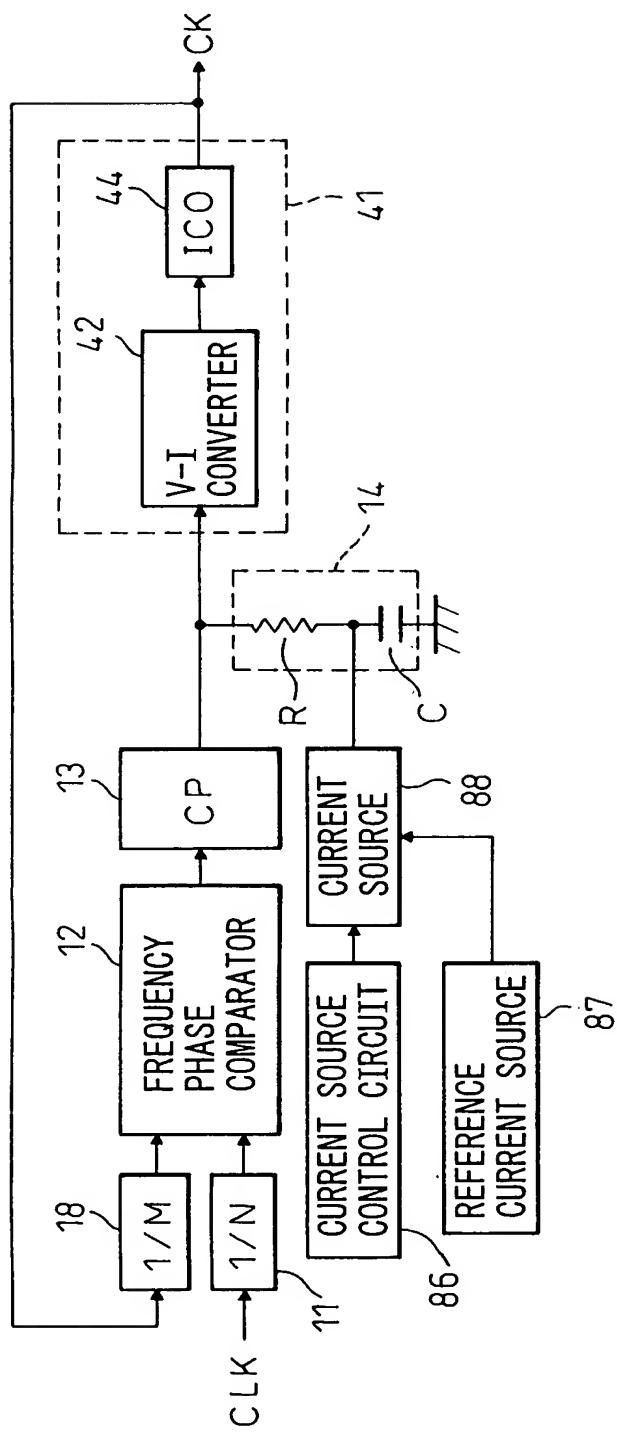
FIG. 38



Title: SPREAD SPECTRUM CLOCK
 GENERATION CIRCUIT, JITTER GENERATION
 CIRCUIT AND SEMICONDUCTOR DEVICE
 Inventor: MIYATA, et al.
 Appln. No.: Unknown
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FIG. 39



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG.40

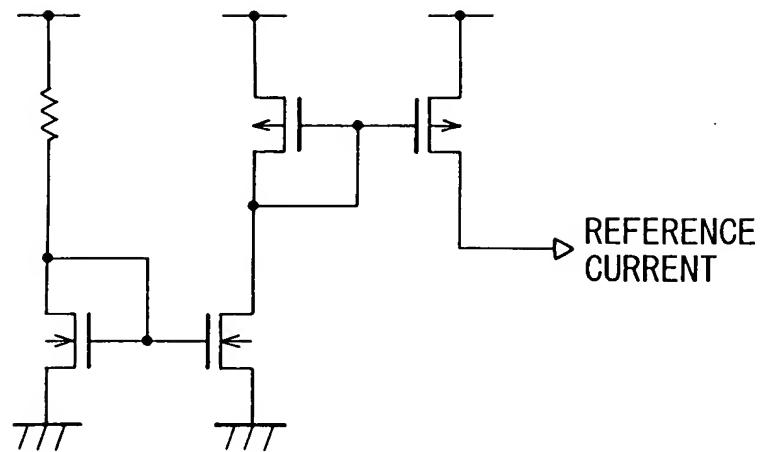
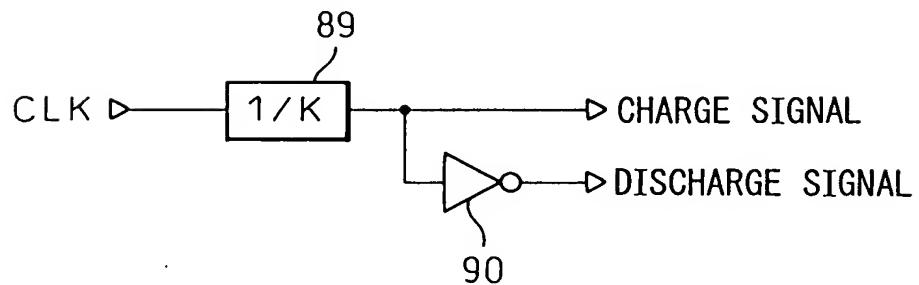


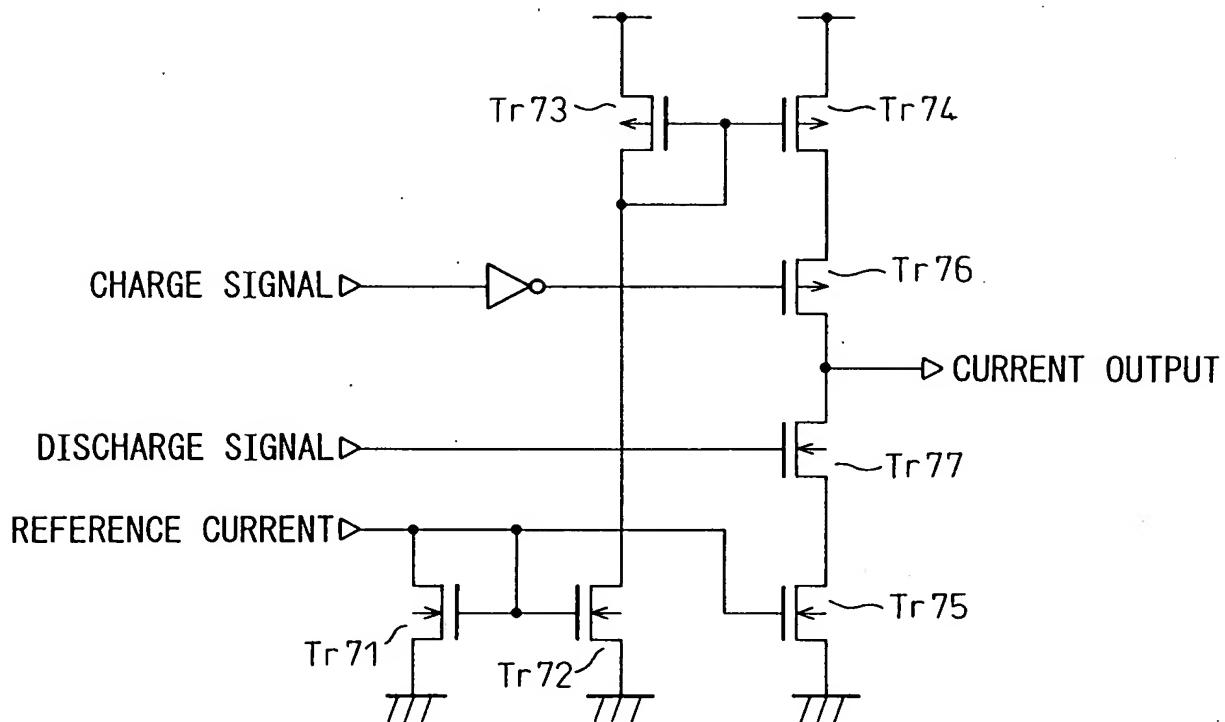
FIG.41



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
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FIG. 42



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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FIG. 43A

CHARGE SIGNAL

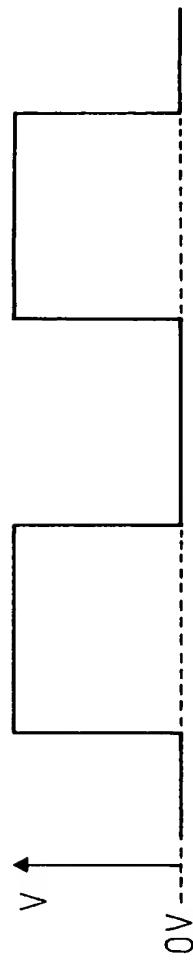


FIG. 43B

DISCHARGE SIGNAL

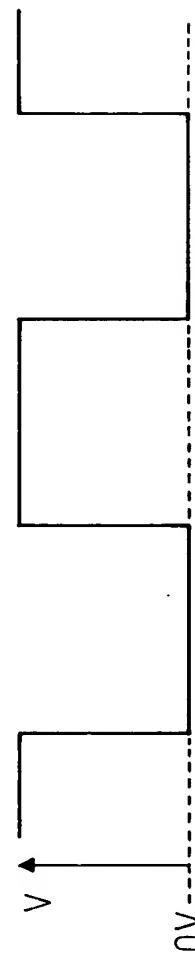


FIG. 43C

CURRENT OF THE
CURRENT SOURCE

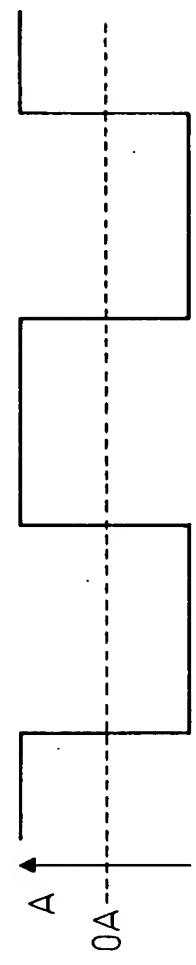
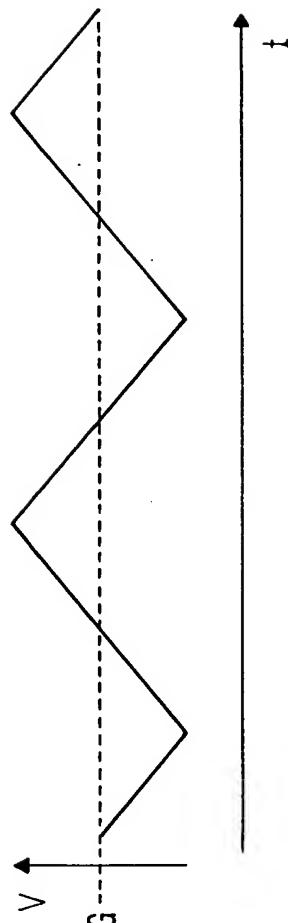


FIG. 43D

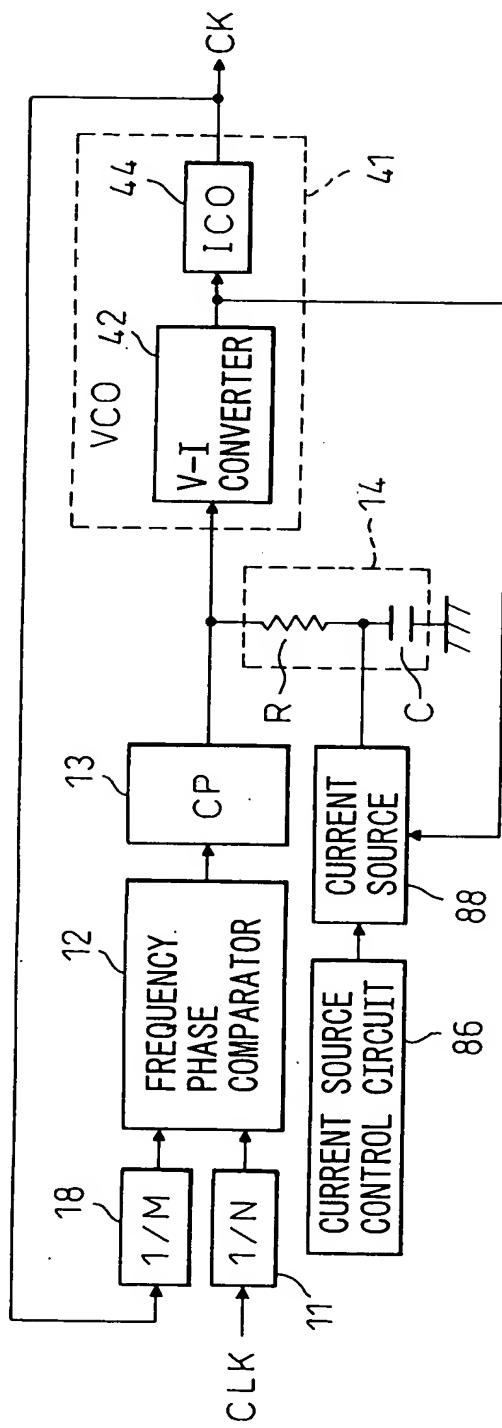
VOLTAGE OF A NODE
BETWEEN A RESISTOR
AND A CAPACITOR OF
A LOOP-FILTER
(VCO CONTROL
)
VOLTAGE



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
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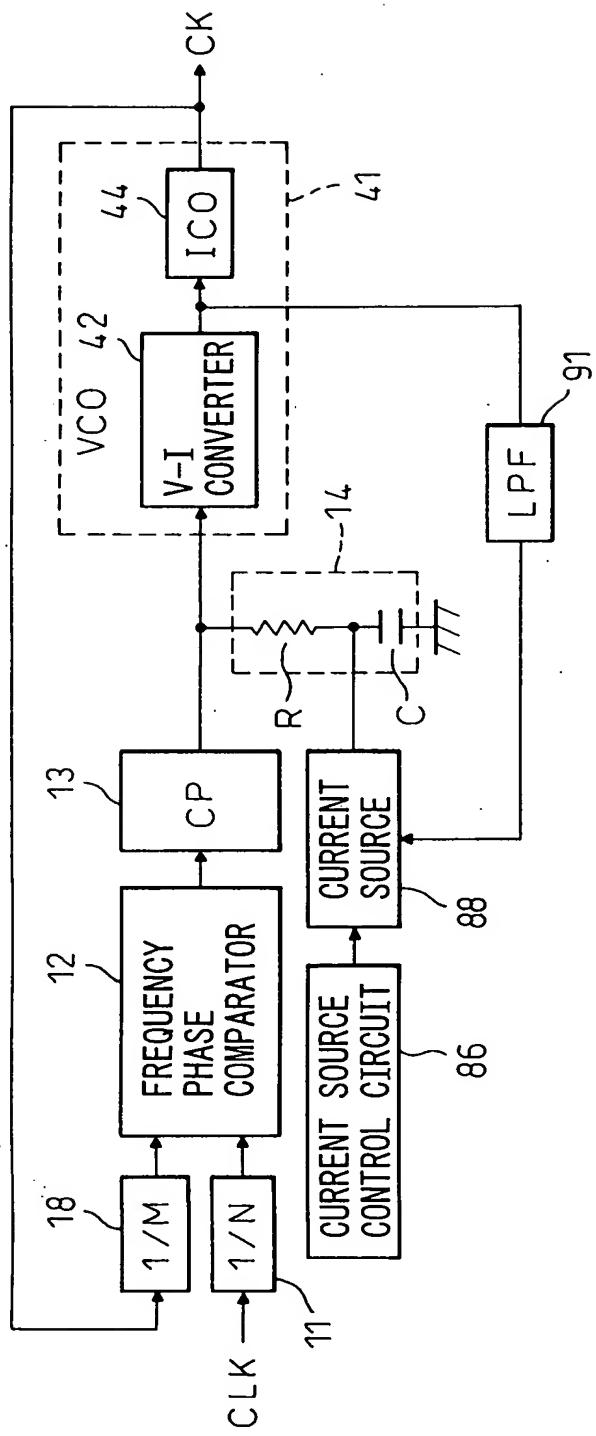
FIG. 44



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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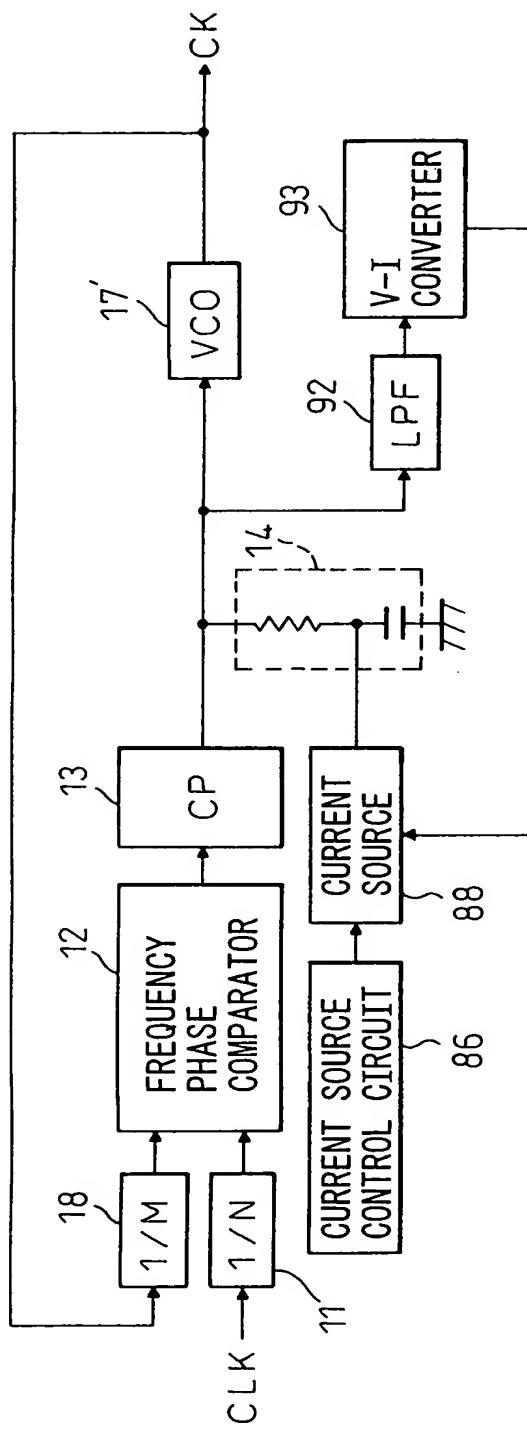
FIG. 45



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
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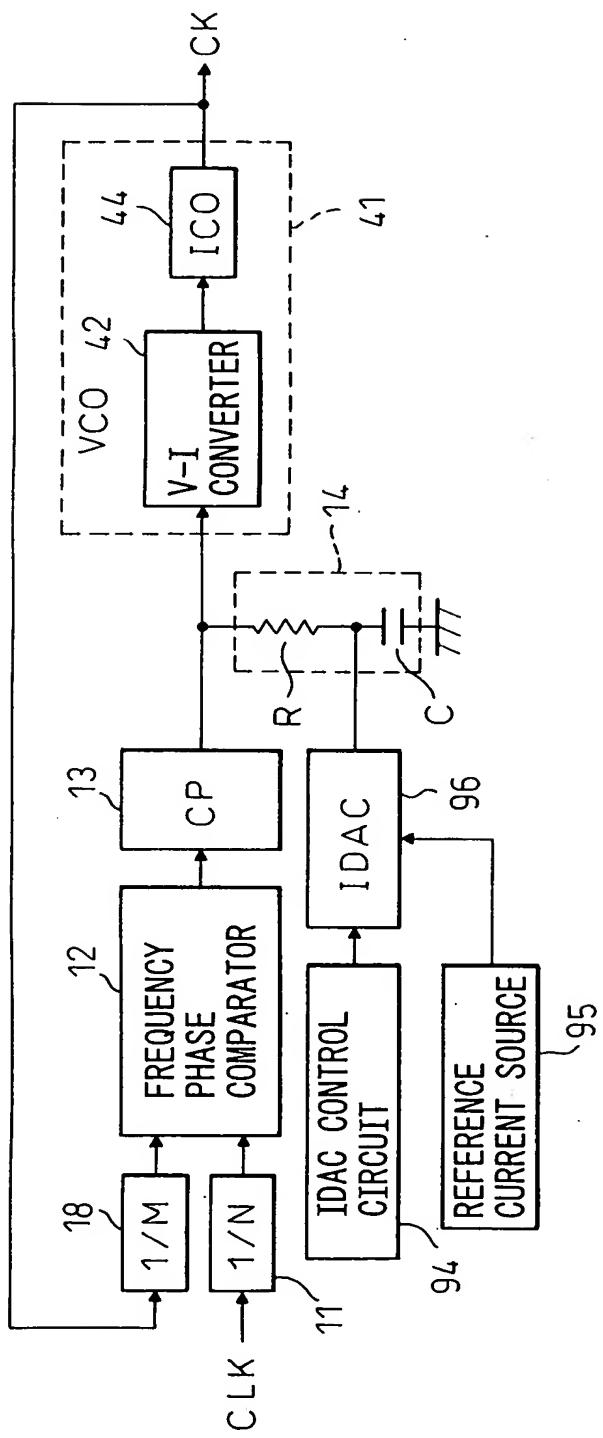
FIG. 46



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
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FIG. 47



Title: SPREAD SPECTRUM CLOCK
 GENERATION CIRCUIT, JITTER GENERATION
 CIRCUIT AND SEMICONDUCTOR DEVICE
 Inventor: MIYATA, et al.
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FIG. 48

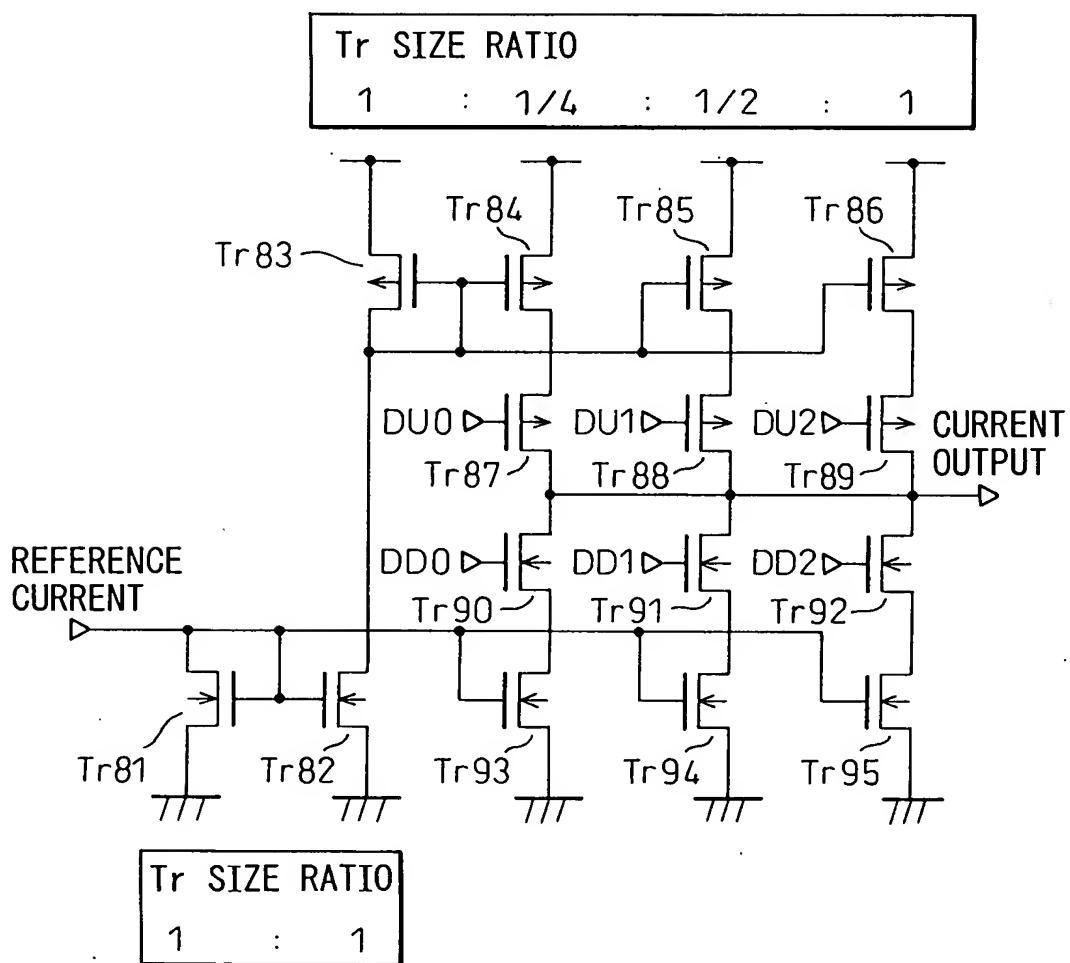
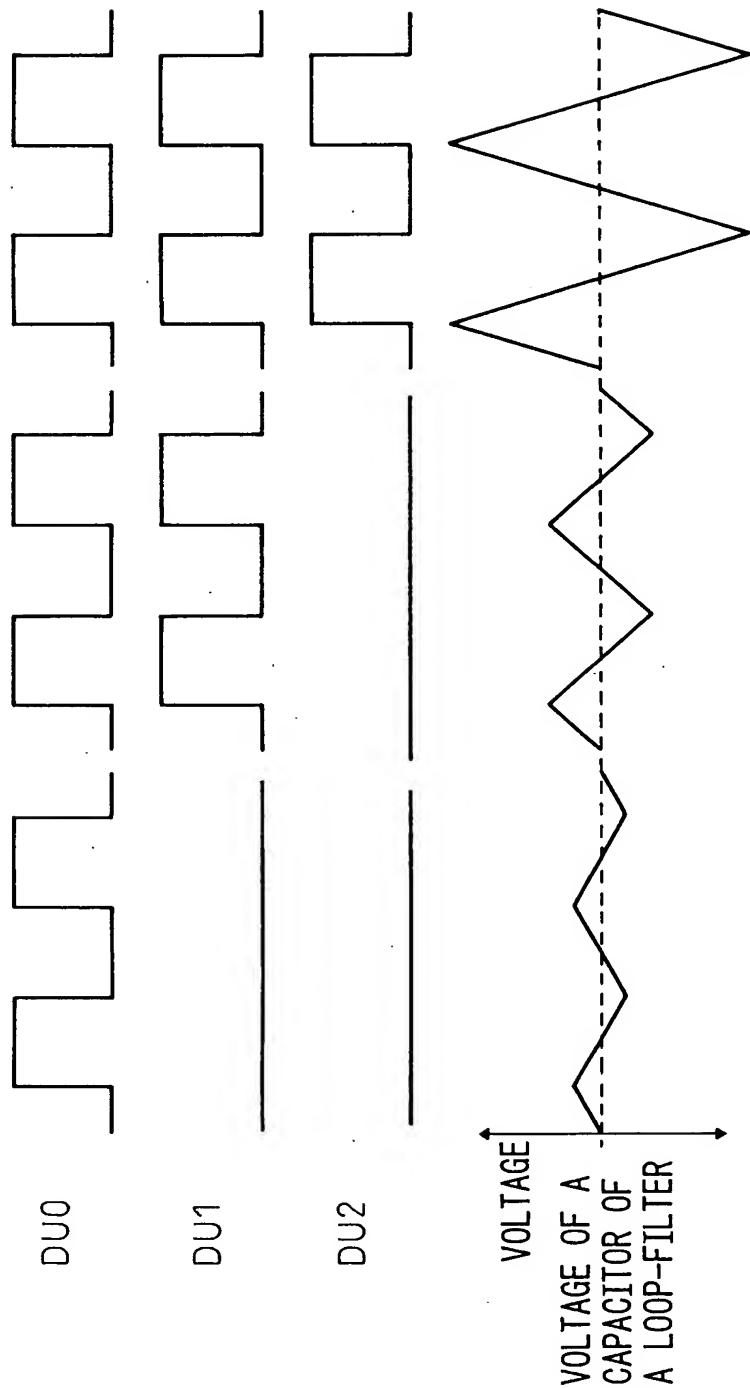


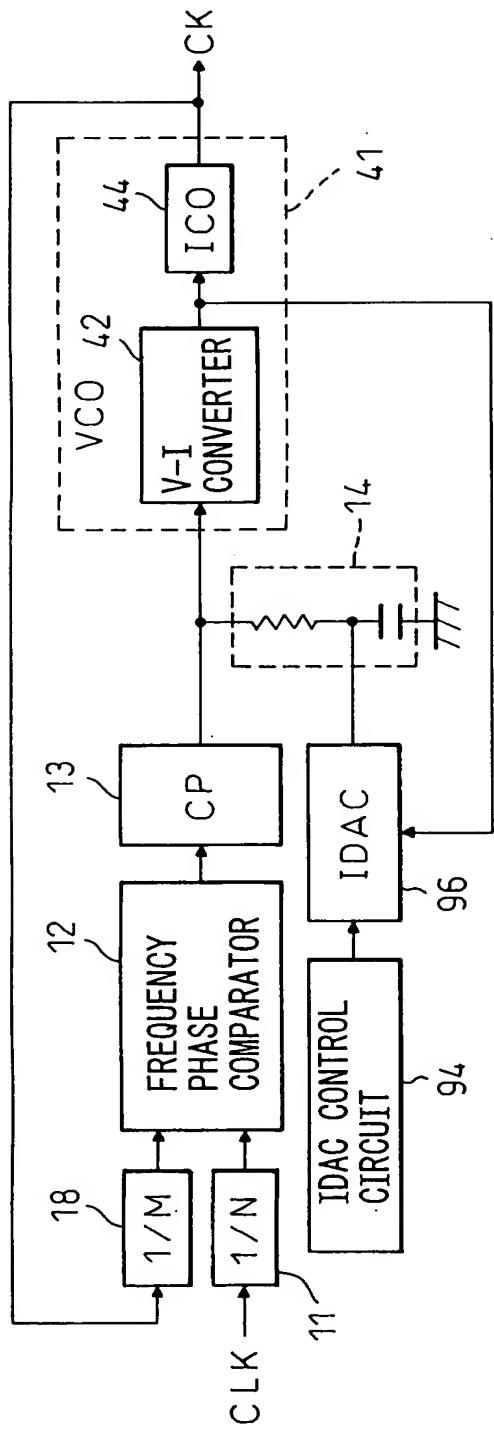
FIG. 49A FIG. 49B FIG. 49C



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appn. No.: Unknown
Docket No.: 100021-00138

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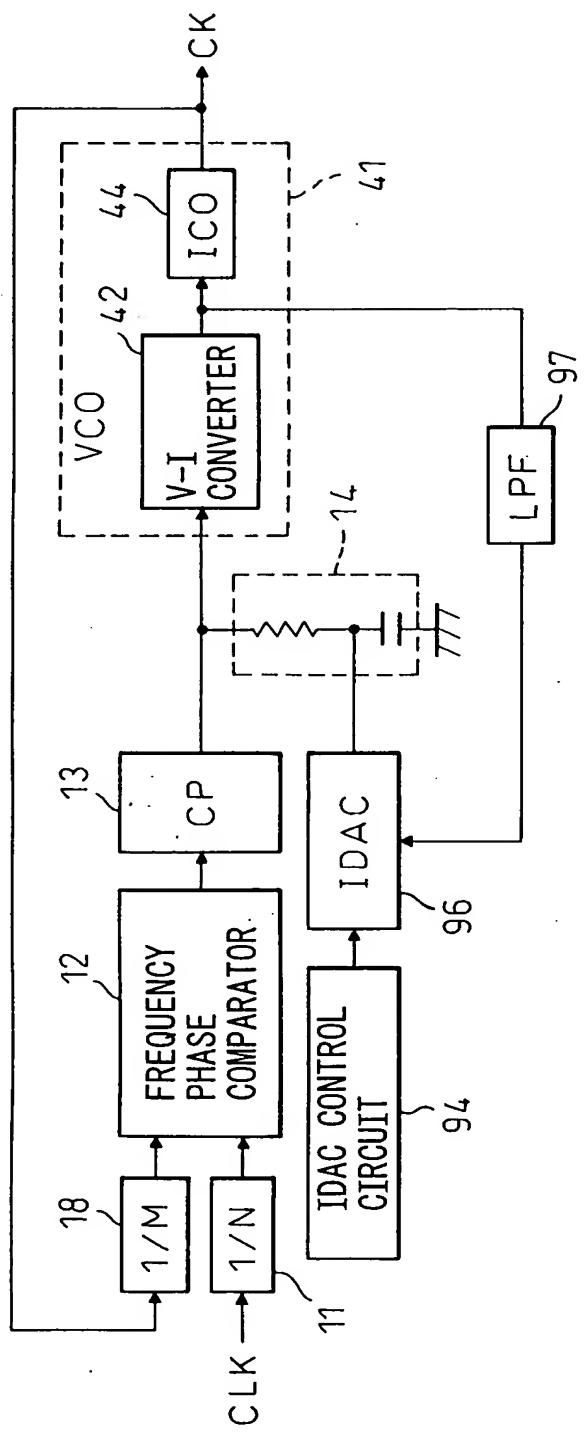
FIG. 50



**Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE**
Inventor: MIYATA, et al.
Appln. No.: Unknown
Docket No.: 100021-00138

$$\frac{48}{62}$$

FIG. 51



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
Docket No.: 100021-00138

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FIG. 52

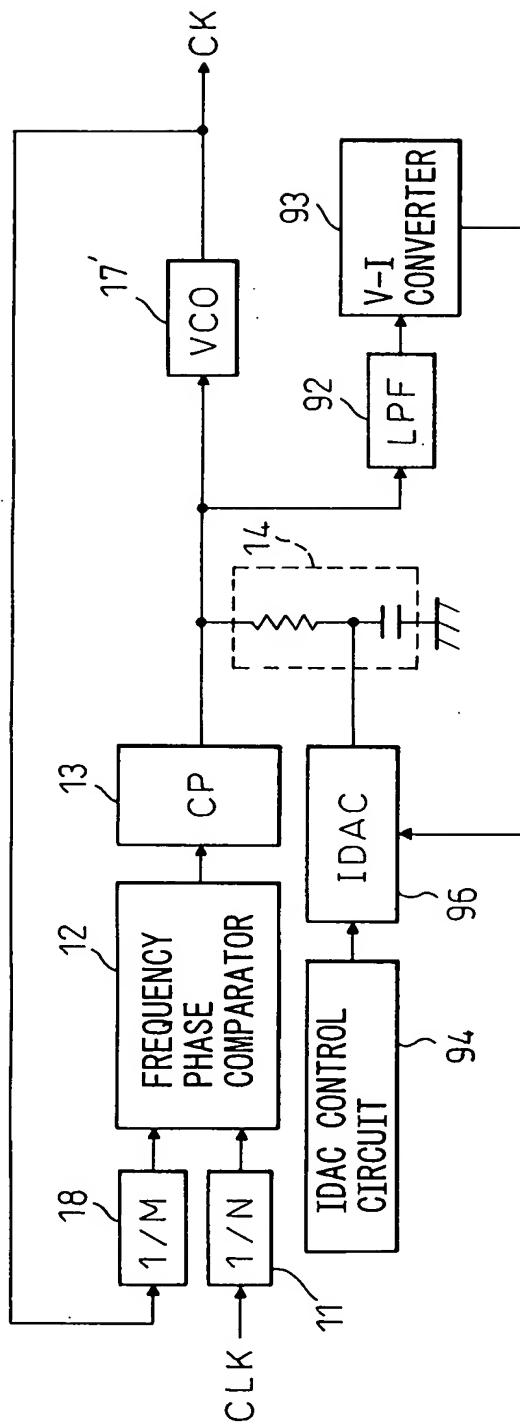


FIG. 53

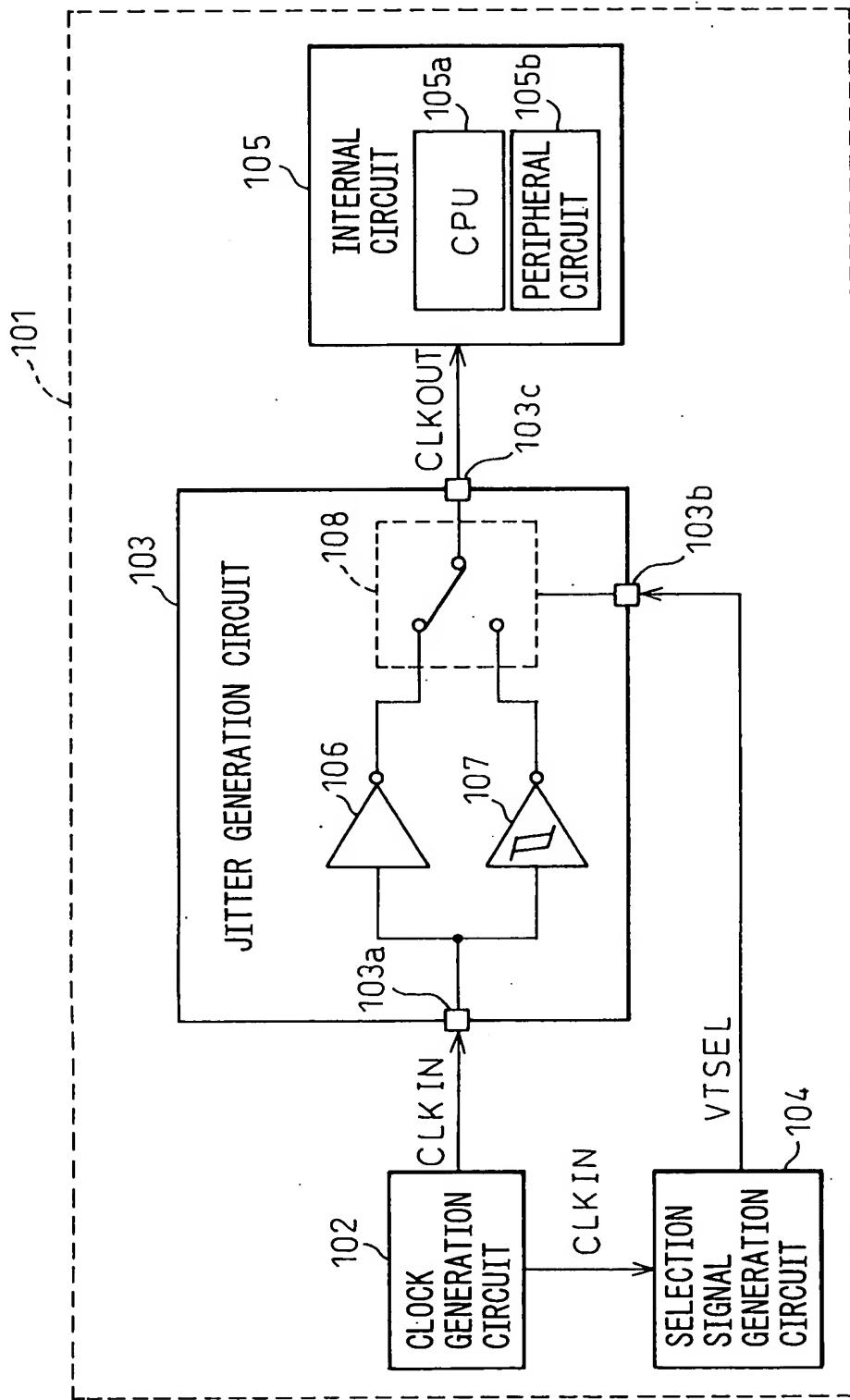


FIG. 54

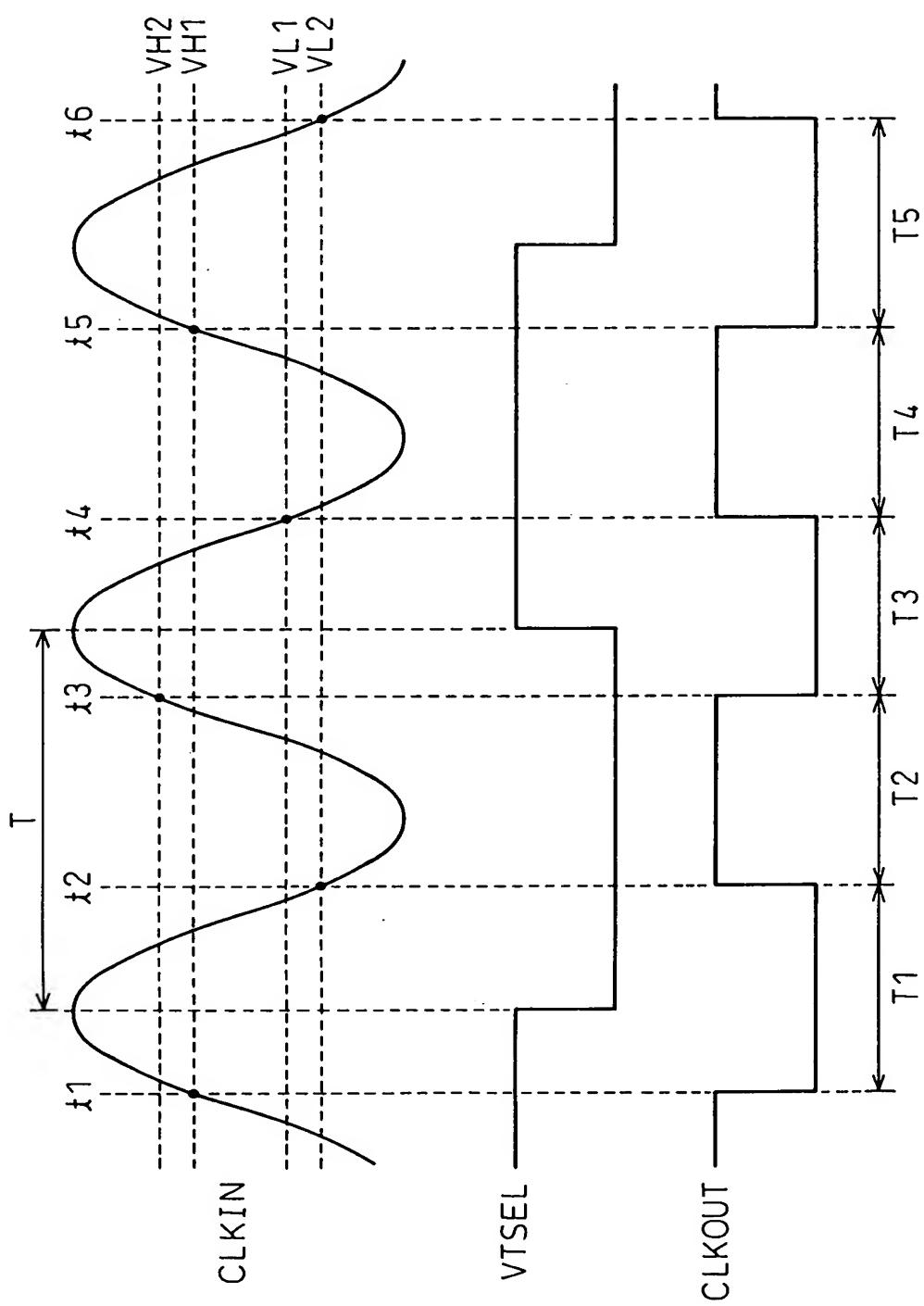


FIG. 55

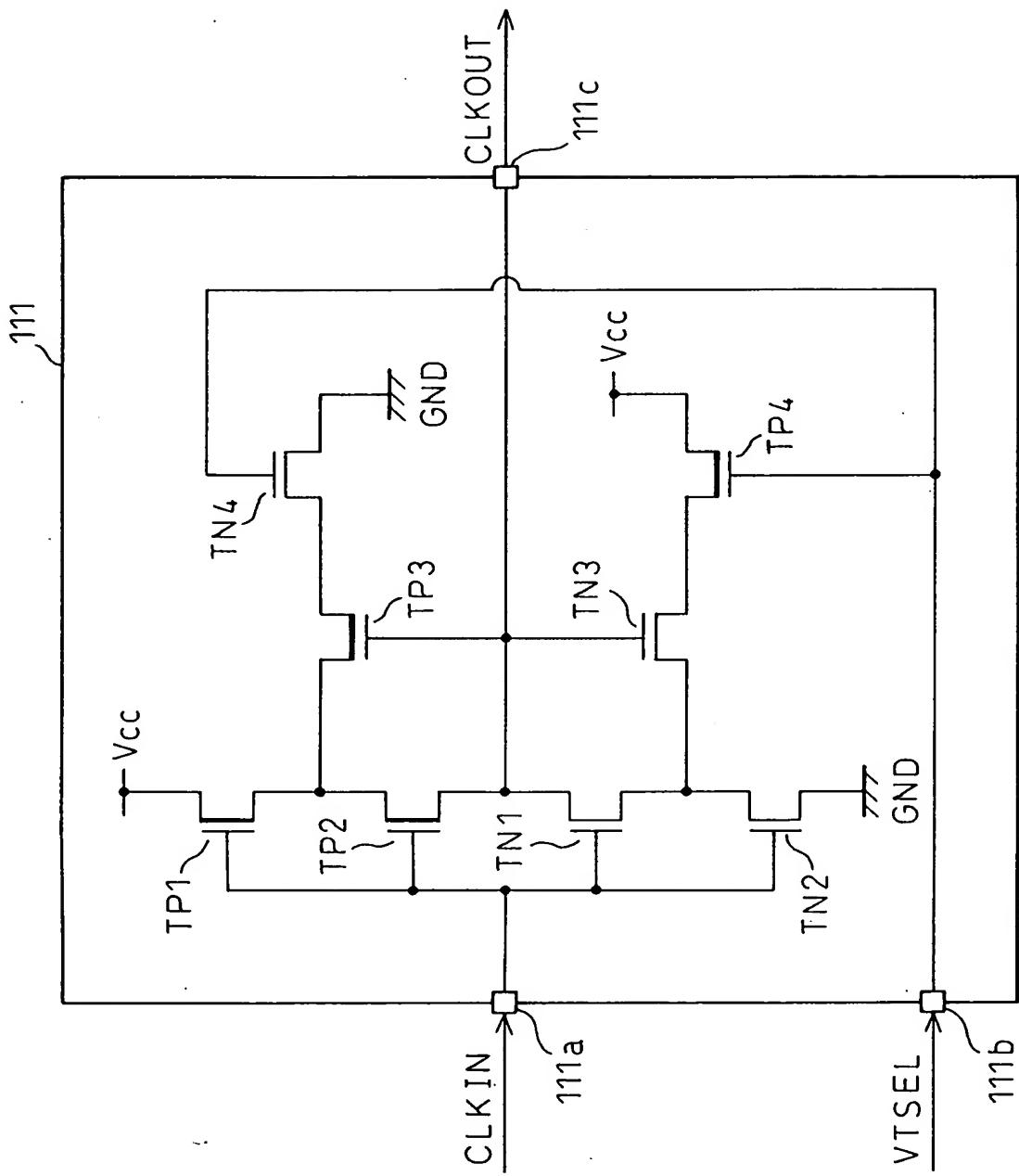
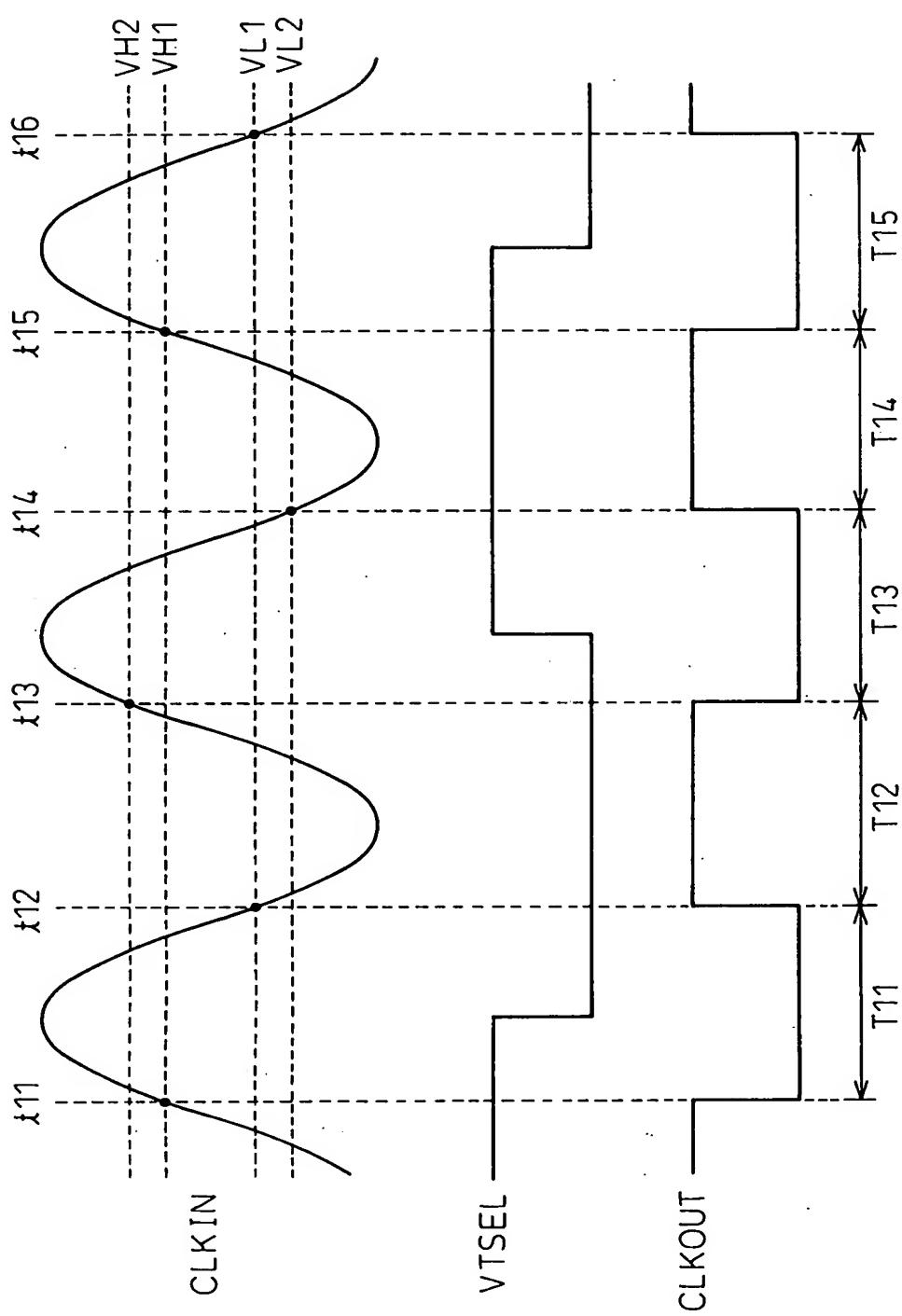


FIG. 56



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FIG. 57

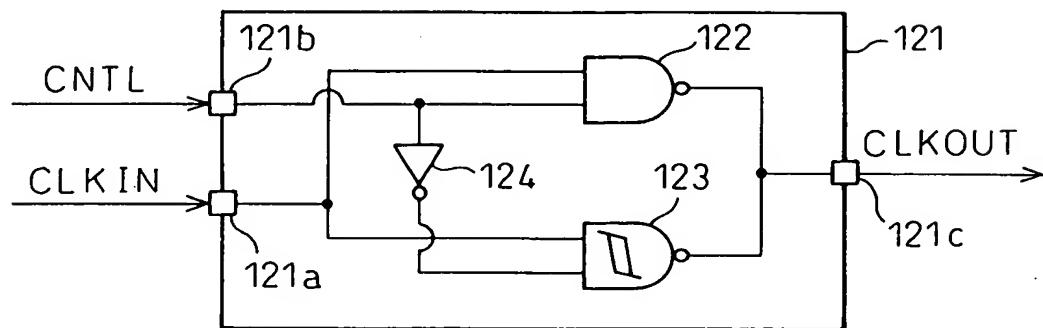


FIG. 58

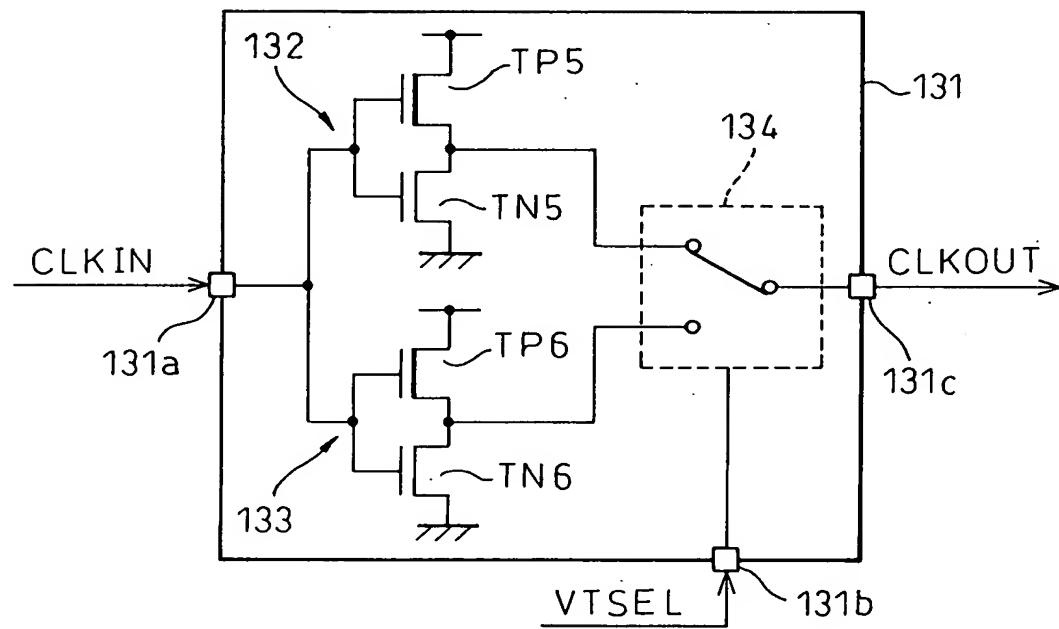


FIG. 59

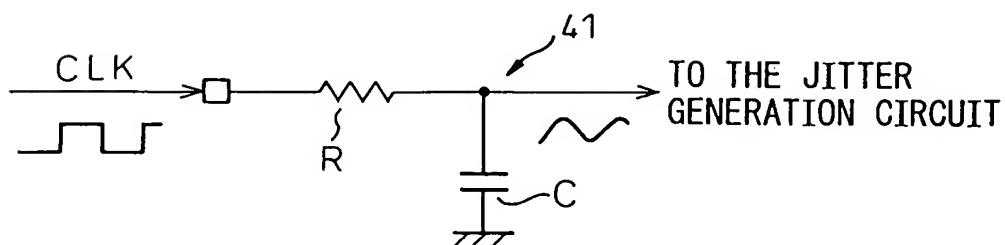
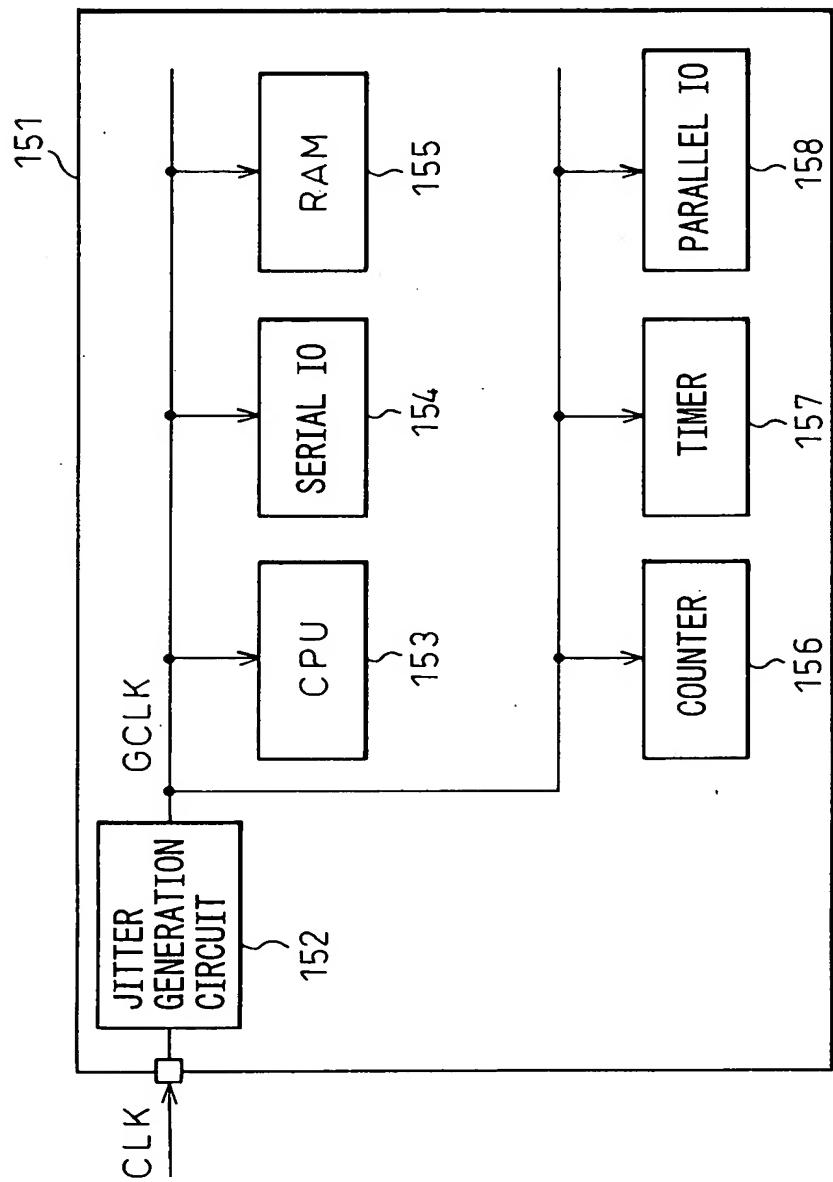


FIG. 60



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
Docket No.: 100021-00138

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FIG. 61

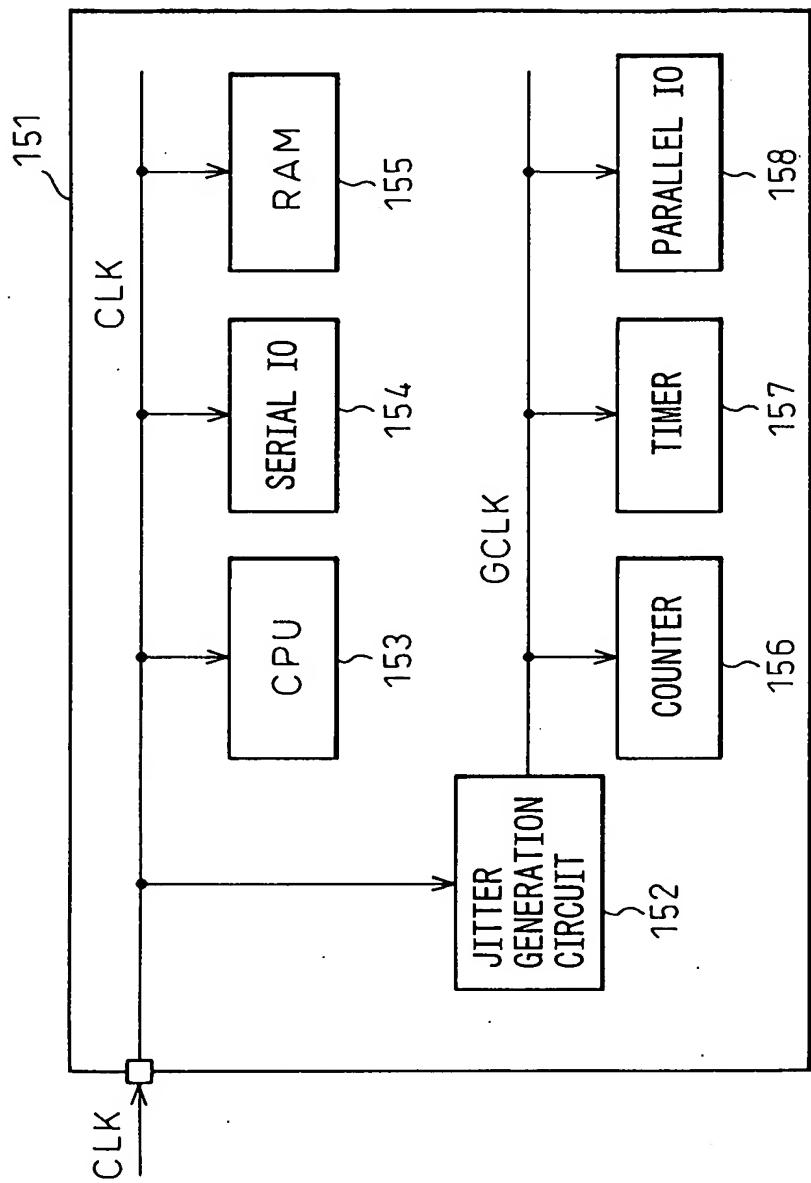


FIG. 62

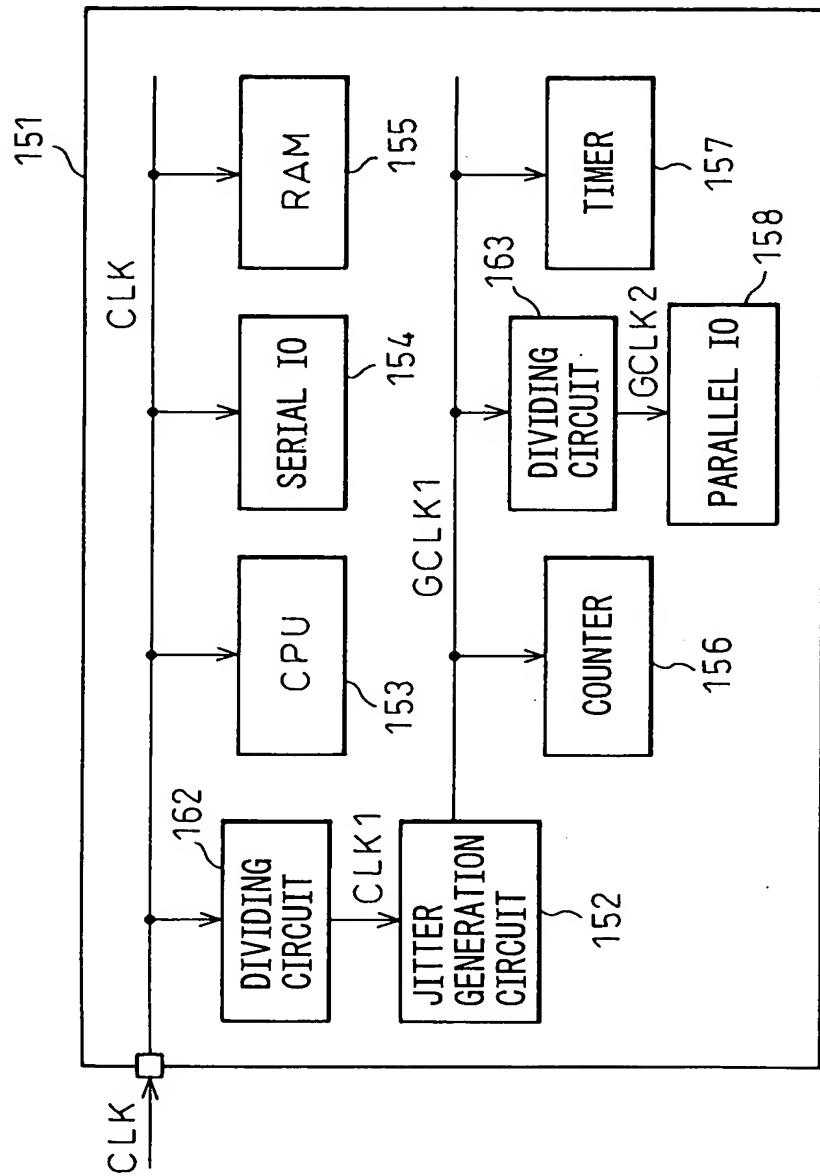


FIG. 63

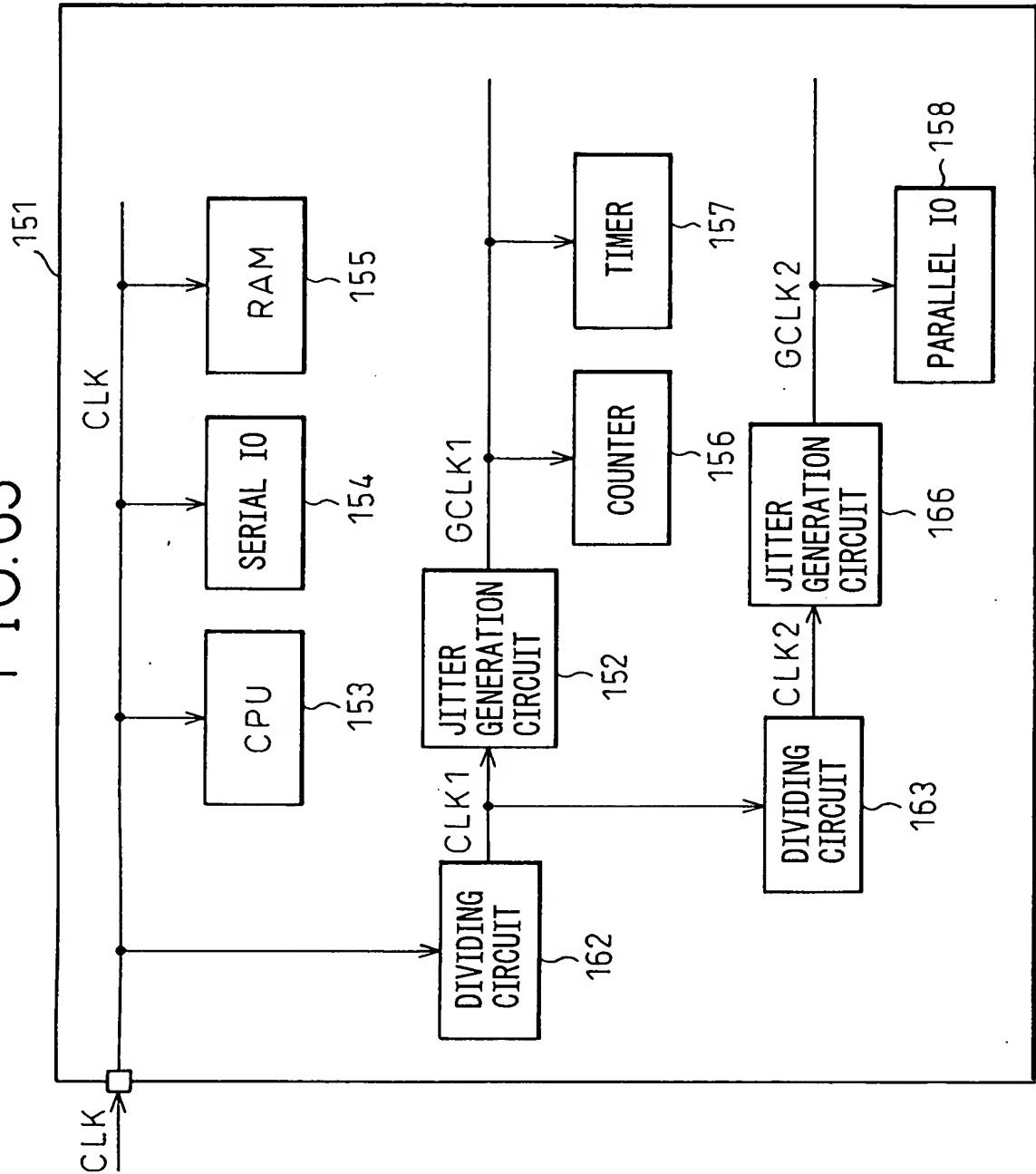
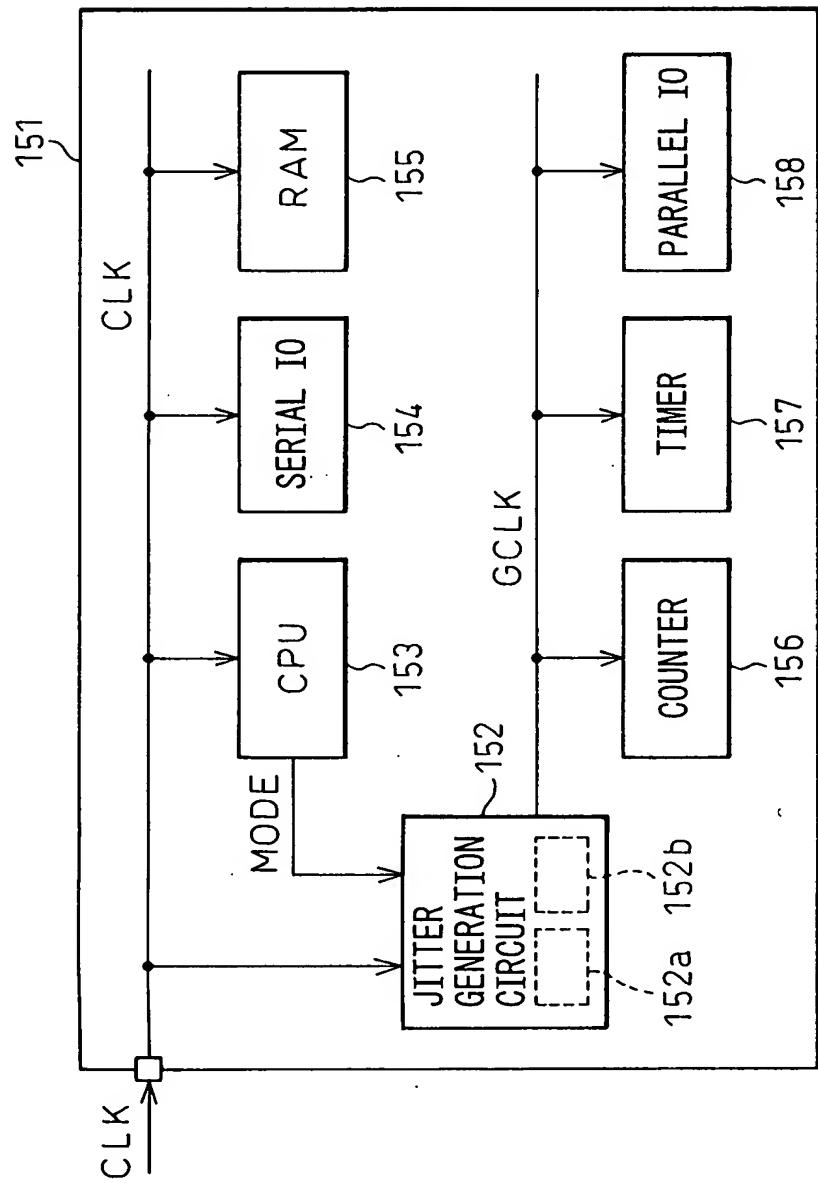


FIG. 64



Title: SPREAD SPECTRUM CLOCK
GENERATION CIRCUIT, JITTER GENERATION
CIRCUIT AND SEMICONDUCTOR DEVICE
Inventor: MIYATA, et al.
Appln. No.: Unknown
Docket No.: 100021-00138

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FIG. 65

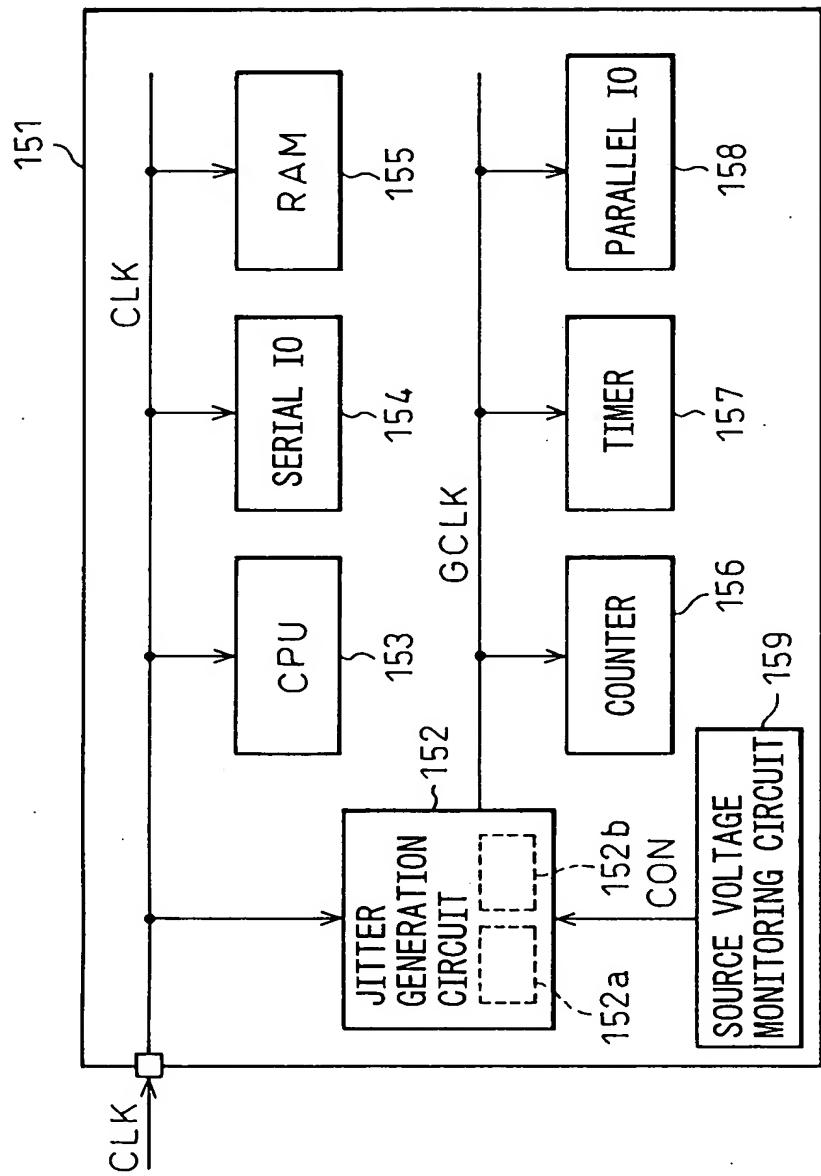


FIG. 66

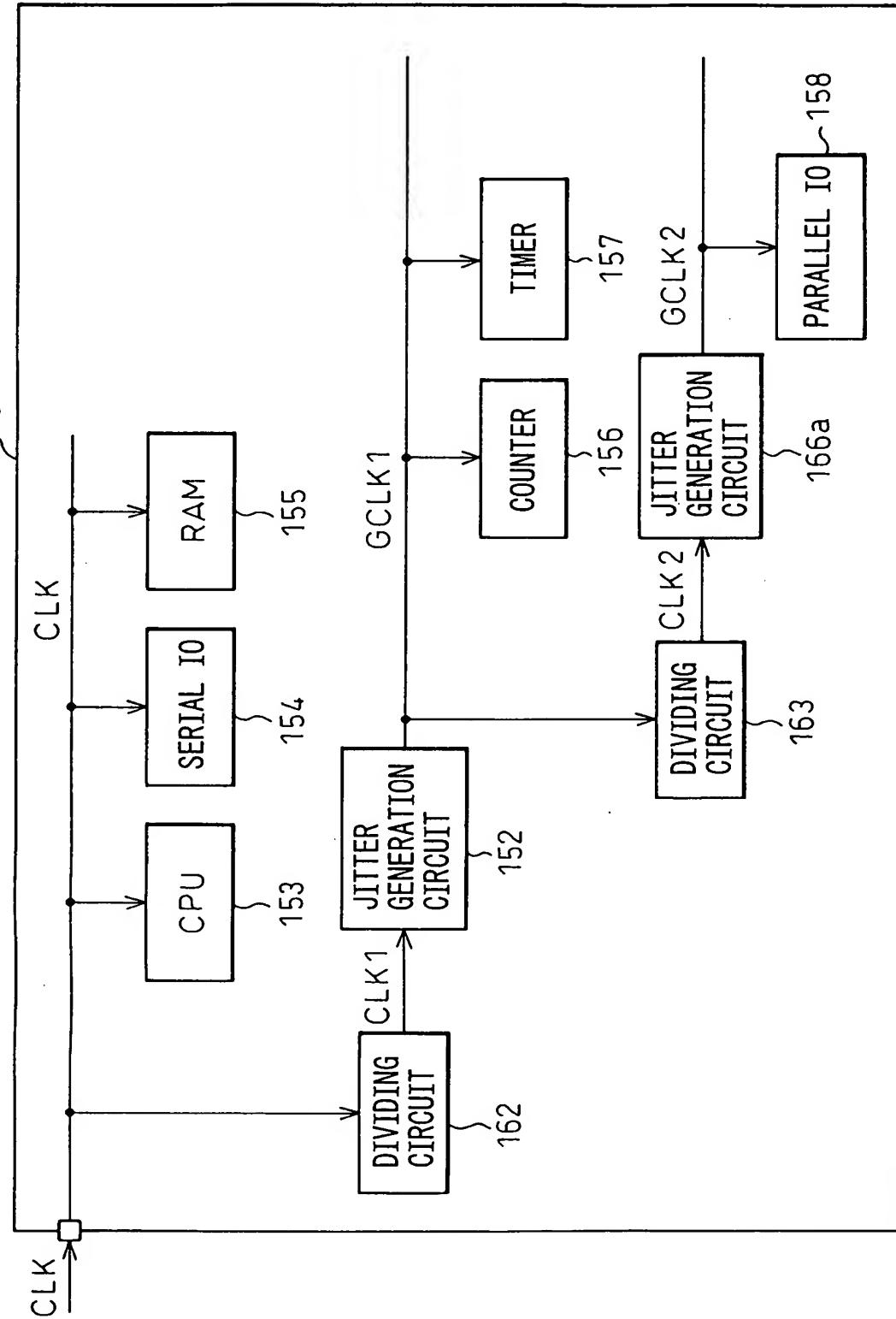


FIG.67

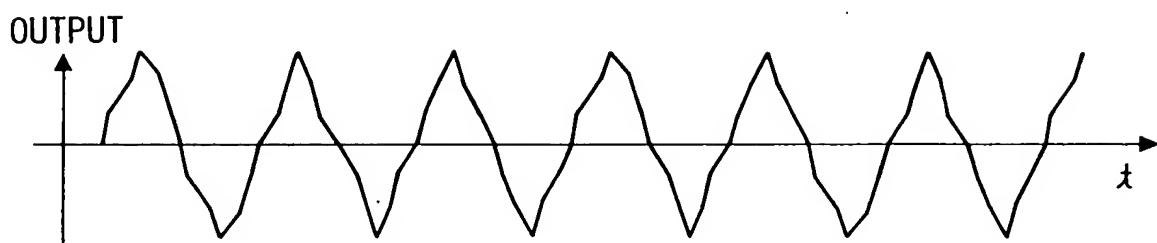


FIG.68

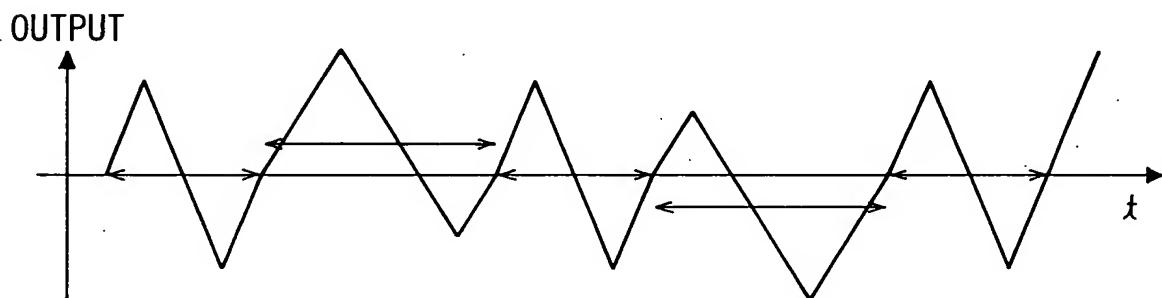


FIG.69

